

# SBML Model Report

## Model name: “Kuhn2009\_EndoMesodermNetwork”



May 5, 2016

### 1 General Overview

This is a document in SBML Level 2 Version 1 format. This model was created by the following four authors: Nick Juty<sup>1</sup>, Lukas Endler<sup>2</sup>, Vijayalakshmi Chelliah<sup>3</sup> and Clemens Kühn<sup>4</sup> at January 15<sup>th</sup> 2010 at 4:34 p. m. and last time modified at April 28<sup>th</sup> 2014 at 5:30 p. m. Table 1 provides an overview of the quantities of all components of this model.

Table 1: Number of components in this model, which are described in the following sections.

Element	Quantity	Element	Quantity
compartment types	0	compartments	3
species types	0	species	622
events	14	constraints	0
reactions	778	function definitions	0
global parameters	66	unit definitions	0
rules	0	initial assignments	0

### Model Notes

This a model from the article:

**Monte Carlo analysis of an ODE Model of the Sea Urchin Endomesoderm Network.**

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Khn C, Wierling C, Khn A, Klipp E, Panopoulou G, Lehrach H, Poustka AJ. *BMC Syst Biol.* 2009 Aug 23;3:83. [19698179](#),

**Abstract:**

**BACKGROUND:** Gene Regulatory Networks (GRNs) control the differentiation, specification and function of cells at the genomic level. The levels of interactions within large GRNs are of enormous depth and complexity. Details about many GRNs are emerging, but in most cases it is unknown to what extent they control a given process, i.e. the grade of completeness is uncertain. This uncertainty stems from limited experimental data, which is the main bottleneck for creating detailed dynamical models of cellular processes. Parameter estimation for each node is often infeasible for very large GRNs. We propose a method, based on random parameter estimations through Monte-Carlo simulations to measure completeness grades of GRNs. **RESULTS:** We developed a heuristic to assess the completeness of large GRNs, using ODE simulations under different conditions and randomly sampled parameter sets to detect parameter-invariant effects of perturbations. To test this heuristic, we constructed the first ODE model of the whole sea urchin endomesoderm GRN, one of the best studied large GRNs. We find that nearly 48% of the parameter-invariant effects correspond with experimental data, which is 65% of the expected optimal agreement obtained from a submodel for which kinetic parameters were estimated and used for simulations. Randomized versions of the model reproduce only 23.5% of the experimental data. **CONCLUSION:** The method described in this paper enables an evaluation of network topologies of GRNs without requiring any parameter values. The benefit of this method is exemplified in the first mathematical analysis of the complete Endomesoderm Network Model. The predictions we provide deliver candidate nodes in the network that are likely to be erroneous or miss unknown connections, which may need additional experiments to improve the network topology. This mathematical model can serve as a scaffold for detailed and more realistic models. We propose that our method can be used to assess a completeness grade of any GRN. This could be especially useful for GRNs involved in human diseases, where often the amount of connectivity is unknown and/or many genes/interactions are missing.

The paper describes several models,  $M_i$ ,  $i=1\dots n$ , where  $M_0$  correspond to the unperturbed model and all the others correspond to the perturbed model. This model is the unperturbed model. The model reproduces figure 5 of the reference publication. The figures were generated by running 1 simulation, whereas in the paper the plotted values are the means of 800 simulations using randomly samples parameter sets. Additional information from the Author: The parameter that were randomly samples are the transcription parameters  $c_{Proteins\dots}$  and  $k_{Proteins}$ . The parameter were sampled from a lognormal distribution with  $\sigma = 1.5$  and  $\mu = 0.5$

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To cite BioModels Database, please use [Le Novre N., Bornstein B., Broicher A., Courtot M., Donizelli M., Dharuri H., Li L., Sauro H., Schilstra M., Shapiro B., Snoep J.L., Hucka M. \(2006\) BioModels Database: A Free, Centralized Database of Curated, Published, Quantitative Kinetic Models of Biochemical and Cellular Systems](#) *Nucleic Acids Res.*, 34: D689-D691.

## 2 Unit Definitions

This is an overview of five unit definitions which are all predefined by SBML and not mentioned in the model.

### 2.1 Unit substance

**Notes** Mole is the predefined SBML unit for substance.

**Definition** mol

### 2.2 Unit volume

**Notes** Litre is the predefined SBML unit for volume.

**Definition** 1

### 2.3 Unit area

**Notes** Square metre is the predefined SBML unit for area since SBML Level 2 Version 1.

**Definition** m<sup>2</sup>

### 2.4 Unit length

**Notes** Metre is the predefined SBML unit for length since SBML Level 2 Version 1.

**Definition** m

### 2.5 Unit time

**Notes** Second is the predefined SBML unit for time.

**Definition** s

## 3 Compartments

This model contains three compartments.

Table 2: Properties of all compartments.

Id	Name	SBO	Spatial Dimensions	Size	Unit	Constant	Outside
default			3	1	litre	<input checked="" type="checkbox"/>	
Compartiment_outside	Compartiment.outside		3	1	litre	<input checked="" type="checkbox"/>	default
Compartiment_cell	cell		3	1	litre	<input checked="" type="checkbox"/>	default

### **3.1 Compartment default**

This is a three dimensional compartment with a constant size of one litre.

### **3.2 Compartment Compartment\_\_outside**

This is a three dimensional compartment with a constant size of one litre, which is surrounded by default.

**Name** Compartment.outside

### **3.3 Compartment Compartment\_\_cell**

This is a three dimensional compartment with a constant size of one litre, which is surrounded by default.

**Name** cell

## 4 Species

This model contains 622 species. The boundary condition of 191 of these species is set to true so that these species' amount cannot be changed by any reaction. Section 8 provides further details and the derived rates of change of each species.

Table 3: Properties of each species.

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
GENE_E_Alx1	GENE_E_Alx1	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Apobec	GENE_E_Apobec	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Blimp1	GENE_E_Blimp1	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Bra	GENE_E_Bra	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Brn	GENE_E_Brn	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_CAPK	GENE_E_CAPK	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_CyP	GENE_E_CyP	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Delta	GENE_E_Delta	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Dpt	GENE_E_Dpt	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Dri	GENE_E_Dri	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_ES	GENE_E_ES	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Endo16	GENE_E_Endo16	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Erg	GENE_E_Erg	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Ets1	GENE_E_Ets1	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Eve	GENE_E_Eve	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Ficolin	GENE_E_Ficolin	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_FoxA	GENE_E_FoxA	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_FoxB	GENE_E_FoxB	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_FoxN23	GENE_E_FoxN23	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_FoxO	GENE_E_FoxO	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_FvMo	GENE_E_FvMo	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
GENE_E_GataC	GENE_E_GataC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_GataE	GENE_E_GataE	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Gcad	GENE_E_Gcad	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Gcm	GENE_E_Gcm	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Gelsolin	GENE_E_Gelsolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_HesC	GENE_E_HesC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Hex	GENE_E_Hex	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Hnf6	GENE_E_Hnf6	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Hox	GENE_E_Hox	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Kakapo	GENE_E_Kakapo	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Lim	GENE_E_Lim	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Msp130	GENE_E_Msp130	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_MspL	GENE_E_MspL	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Not	GENE_E_Not	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Nrl	GENE_E_Nrl	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_OrCt	GENE_E_OrCt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Otx	GENE_E_Otx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Pks	GENE_E_Pks	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Pmar1	GENE_E_Pmar1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Sm27	GENE_E_Sm27	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Sm30	GENE_E_Sm30	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Sm50	GENE_E_Sm50	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Snail	GENE_E_Snail	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_SoxB1	GENE_E_SoxB1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_SoxC	GENE_E_SoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_SuTx	GENE_E_SuTx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_TBr	GENE_E_TBr	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
GENE_E_Tel	GENE_E_Tel	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Tgif	GENE_E_Tgif	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_VEGFR	GENE_E_VEGFR	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_Wnt8	GENE_E_Wnt8	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_E_z13	GENE_E_z13	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Alx1	GENE_M_Alx1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Apobec	GENE_M_Apobec	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Blimp1	GENE_M_Blimp1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Bra	GENE_M_Bra	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Brn	GENE_M_Brn	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_CAPK	GENE_M_CAPK	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_CyP	GENE_M_CyP	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Delta	GENE_M_Delta	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Dpt	GENE_M_Dpt	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Dri	GENE_M_Dri	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Endo16	GENE_M_Endo16	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Erg	GENE_M_Erg	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Ets1	GENE_M_Ets1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Eve	GENE_M_Eve	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Ficolin	GENE_M_Ficolin	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_FoxA	GENE_M_FoxA	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_FoxB	GENE_M_FoxB	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_FoxN23	GENE_M_FoxN23	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_FoxO	GENE_M_FoxO	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_FvMo	GENE_M_FvMo	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_GataC	GENE_M_GataC	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_GataE	GENE_M_GataE	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
GENE_M_Gcad	GENE_M_Gcad	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Gcm	GENE_M_Gcm	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Gelsolin	GENE_M_Gelsolin	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_HesC	GENE_M_HesC	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Hex	GENE_M_Hex	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Hnf6	GENE_M_Hnf6	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Hox	GENE_M_Hox	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Kakapo	GENE_M_Kakapo	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Lim	GENE_M_Lim	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Msp130	GENE_M_Msp130	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_MspL	GENE_M_MspL	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Not	GENE_M_Not	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Nrl	GENE_M_Nrl	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_OrCt	GENE_M_OrCt	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Otx	GENE_M_Otx	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Pks	GENE_M_Pks	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Pmar1	GENE_M_Pmar1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Sm27	GENE_M_Sm27	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Sm30	GENE_M_Sm30	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Sm50	GENE_M_Sm50	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Snail	GENE_M_Snail	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_SoxB1	GENE_M_SoxB1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_SoxC	GENE_M_SoxC	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_SuTx	GENE_M_SuTx	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_TBr	GENE_M_TBr	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Tel	GENE_M_Tel	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Tgif	GENE_M_Tgif	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
GENE_M_VEGFR	GENE_M_VEGFR	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_Wnt8	GENE_M_Wnt8	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_M_z13	GENE_M_z13	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Alx1	GENE_P_Alx1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Apobec	GENE_P_Apobec	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Blimp1	GENE_P_Blimp1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Bra	GENE_P_Bra	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Brn	GENE_P_Brn	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_CAPK	GENE_P_CAPK	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_CyP	GENE_P_CyP	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Delta	GENE_P_Delta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Dpt	GENE_P_Dpt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Dri	GENE_P_Dri	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Endo16	GENE_P_Endo16	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Erg	GENE_P_Erg	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Ets1	GENE_P_Ets1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Eve	GENE_P_Eve	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Ficolin	GENE_P_Ficolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_FoxA	GENE_P_FoxA	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_FoxB	GENE_P_FoxB	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_FoxN23	GENE_P_FoxN23	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_FoxO	GENE_P_FoxO	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_FvMo	GENE_P_FvMo	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_GataC	GENE_P_GataC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_GataE	GENE_P_GataE	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Gcad	GENE_P_Gcad	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENE_P_Gcm	GENE_P_Gcm	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

	Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
	GENE_P_Gelsolin	GENE_P_Gelsolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_HesC	GENE_P_HesC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Hex	GENE_P_Hex	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Hnf6	GENE_P_Hnf6	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Hox	GENE_P_Hox	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Kakapo	GENE_P_Kakapo	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Lim	GENE_P_Lim	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Msp130	GENE_P_Msp130	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_MspL	GENE_P_MspL	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Not	GENE_P_Not	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Nrl	GENE_P_Nrl	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_OrCt	GENE_P_OrCt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Otx	GENE_P_Otx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Pks	GENE_P_Pks	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Pmar1	GENE_P_Pmar1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Sm27	GENE_P_Sm27	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Sm30	GENE_P_Sm30	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Sm50	GENE_P_Sm50	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Snail	GENE_P_Snail	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_SoxB1	GENE_P_SoxB1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_SoxC	GENE_P_SoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_SuTx	GENE_P_SuTx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_TBr	GENE_P_TBr	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Tel	GENE_P_Tel	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Tgif	GENE_P_Tgif	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_VEGFR	GENE_P_VEGFR	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	GENE_P_Wnt8	GENE_P_Wnt8	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
GENE_P_z13	GENE_P_z13	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_Gcad	PRE_E_Gcad	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_Notch	PRE_E_Notch	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_Otx	PRE_E_Otx	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_SoxB1	PRE_E_SoxB1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_SuH	PRE_E_SuH	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_UMR	PRE_E_UMR	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_UVAOtx	PRE_E_UVAOtx	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_UbiqSoxB1	PRE_E_UbiqSoxB1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_VEGF	PRE_E_VEGF	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_E_cB	PRE_E_cB	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_Gcad	PRE_M_Gcad	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_Notch	PRE_M_Notch	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_Otx	PRE_M_Otx	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_SoxB1	PRE_M_SoxB1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_SuH	PRE_M_SuH	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_UMADelta	PRE_M_UMADelta	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_UMANrl	PRE_M_UMANrl	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_UMR	PRE_M_UMR	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_UbiqSoxB1	PRE_M_UbiqSoxB1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_M_cB	PRE_M_cB	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_P_Ets1	PRE_P_Ets1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_P_Gcad	PRE_P_Gcad	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_P_L1	PRE_P_L1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_P_Otx	PRE_P_Otx	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_P_UbiqAlx1	PRE_P_UbiqAlx1	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE_P_UbiqES	PRE_P_UbiqES	Compartment__cell	mol · l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

	Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
	PRE_P_UbiqEts1	PRE_P_UbiqEts1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PRE_P_UbiqHesC	PRE_P_UbiqHesC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PRE_P_UbiqHnf6	PRE_P_UbiqHnf6	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PRE_P_UbiqSoxC	PRE_P_UbiqSoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PRE_P_UbiqTel	PRE_P_UbiqTel	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PRE_P_cB	PRE_P_cB	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	PROTEIN_E_Alx1	PROTEIN_E_Alx1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Apobec	PROTEIN_E_Apobec	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Bra	PROTEIN_E_Bra	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Brn	PROTEIN_E_Brn	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_CAPK	PROTEIN_E_CAPK	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_CyP	PROTEIN_E_CyP	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Delta	PROTEIN_E_Delta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Delta2	PROTEIN_E_Delta2	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Dpt	PROTEIN_E_Dpt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Dri	PROTEIN_E_Dri	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_ES	PROTEIN_E_ES	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Endo16	PROTEIN_E_Endo16	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Erg	PROTEIN_E_Erg	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Ets1	PROTEIN_E_Ets1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Eve	PROTEIN_E_Eve	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Ficolin	PROTEIN_E_Ficolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_FoxA	PROTEIN_E_FoxA	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_FoxB	PROTEIN_E_FoxB	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_FoxN23	PROTEIN_E_FoxN23	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_FoxO	PROTEIN_E_FoxO	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_E_FvMo	PROTEIN_E_FvMo	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_GSK3_a	PROTEIN_E_GSK3_a	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_GSK3_i	PROTEIN_E_GSK3_i	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_GataC	PROTEIN_E_GataC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_GataE	PROTEIN_E_GataE	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Gcad	PROTEIN_E_Gcad	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Gcm	PROTEIN_E_Gcm	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E-_Gelsolin	PROTEIN_E_Gelsolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Gro	PROTEIN_E_Gro	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_GroTFC	PROTEIN_E_GroTFC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_HesC	PROTEIN_E_HesC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Hex	PROTEIN_E_Hex	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Hox	PROTEIN_E_Hox	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Kakapo	PROTEIN_E_Kakapo	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_L1	PROTEIN_E_L1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Lim	PROTEIN_E_Lim	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Msp130	PROTEIN_E_Msp130	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_MspL	PROTEIN_E_MspL	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Not	PROTEIN_E_Not	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Notch	PROTEIN_E_Notch	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Notch2	PROTEIN_E_Notch2	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Nrl	PROTEIN_E_Nrl	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_OrCt	PROTEIN_E_OrCt	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_E_Otx	PROTEIN_E_Otx	Compartment__cell	mol · l <sup>-1</sup>	□	□

	Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
	PROTEIN_E_Pks	PROTEIN_E_Pks	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Pmar1	PROTEIN_E_Pmar1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Sm27	PROTEIN_E_Sm27	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Sm30	PROTEIN_E_Sm30	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Sm50	PROTEIN_E_Sm50	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Snail	PROTEIN_E_Snail	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_SoxB1	PROTEIN_E_SoxB1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_SoxC	PROTEIN_E_SoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_SuH	PROTEIN_E_SuH	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_SuHN	PROTEIN_E_SuHN	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_SuTx	PROTEIN_E_SuTx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_TBr	PROTEIN_E_TBr	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_TCF	PROTEIN_E_TCF	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Tel	PROTEIN_E_Tel	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_Tgif	PROTEIN_E_Tgif	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_-_UMADelta	PROTEIN_E_UMADelta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_UMANrl	PROTEIN_E_UMANrl	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_UMR	PROTEIN_E_UMR	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_UVA0tx	PROTEIN_E_UVA0tx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_-_UbiqAlx1	PROTEIN_E_UbiqAlx1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_-_UbiqDelta	PROTEIN_E_UbiqDelta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_UbiqES	PROTEIN_E_UbiqES	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_E_-_UbiqEts1	PROTEIN_E_UbiqEts1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_E_UbiqGcad	PROTEIN_E_UbiqGcad	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_UbiqHesC	PROTEIN_E_UbiqHesC	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_UbiqHnf6	PROTEIN_E_UbiqHnf6	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_UbiqSoxB1	PROTEIN_E_UbiqSoxB1	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_UbiqSoxC	PROTEIN_E_UbiqSoxC	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_UbiqTel	PROTEIN_E_UbiqTel	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_VEGF	PROTEIN_E_VEGF	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_VEGFR	PROTEIN_E_VEGFR	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_VEGFSignal	PROTEIN_E_VEGFSignal	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_Wnt8	PROTEIN_E_Wnt8	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_cB	PROTEIN_E_cB	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_frizzled_a	PROTEIN_E_frizzled_a	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_frizzled_i	PROTEIN_E_frizzled_i	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_nBTcf	PROTEIN_E_nBTcf	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_E_z13	PROTEIN_E_z13	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_GCM	PROTEIN_GCM	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_M_Alx1	PROTEIN_M_Alx1	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_M_Apobec	PROTEIN_M_Apobec	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	Compartment_cell	mol · l <sup>-1</sup>	☐	☐

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_M_Bra	PROTEIN_M_Bra	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Brn	PROTEIN_M_Brn	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_CAPK	PROTEIN_M_CAPK	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_CyP	PROTEIN_M_CyP	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Delta	PROTEIN_M_Delta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Delta2	PROTEIN_M_Delta2	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Dpt	PROTEIN_M_Dpt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Dri	PROTEIN_M_Dri	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Endo16	PROTEIN_M_Endo16	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Erg	PROTEIN_M_Erg	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Ets1	PROTEIN_M_Ets1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Eve	PROTEIN_M_Eve	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Ficolin	PROTEIN_M_Ficolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_FoxA	PROTEIN_M_FoxA	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_FoxB	PROTEIN_M_FoxB	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_FoxN23	PROTEIN_M_FoxN23	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_FoxO	PROTEIN_M_FoxO	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_FvMo	PROTEIN_M_FvMo	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_GSK3_a	PROTEIN_M_GSK3_a	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_GSK3_i	PROTEIN_M_GSK3_i	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_GataC	PROTEIN_M_GataC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_GataE	PROTEIN_M_GataE	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Gcad	PROTEIN_M_Gcad	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Gcm	PROTEIN_M_Gcm	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M-_Gelsolin	PROTEIN_M_Gelsolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Gro	PROTEIN_M_Gro	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_GroTFC	PROTEIN_M_GroTFC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_HesC	PROTEIN_M_HesC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Hex	PROTEIN_M_Hex	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Hox	PROTEIN_M_Hox	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Kakapo	PROTEIN_M_Kakapo	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_L1	PROTEIN_M_L1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Lim	PROTEIN_M_Lim	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Msp130	PROTEIN_M_Msp130	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_MspL	PROTEIN_M_MspL	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Not	PROTEIN_M_Not	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Notch	PROTEIN_M_Notch	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Notch2	PROTEIN_M_Notch2	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Nrl	PROTEIN_M_Nrl	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_OrCt	PROTEIN_M_OrCt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Otx	PROTEIN_M_Otx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Pks	PROTEIN_M_Pks	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Pmar1	PROTEIN_M_Pmar1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Sm27	PROTEIN_M_Sm27	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Sm30	PROTEIN_M_Sm30	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Sm50	PROTEIN_M_Sm50	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_Snail	PROTEIN_M_Snail	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_SoxB1	PROTEIN_M_SoxB1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_SoxC	PROTEIN_M_SoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_SuH	PROTEIN_M_SuH	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
PROTEIN_M_SuHN	PROTEIN_M_SuHN	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>

	Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
	PROTEIN_M_SuTx	PROTEIN_M_SuTx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_TBr	PROTEIN_M_TBr	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_TCF	PROTEIN_M_TCF	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_Tel	PROTEIN_M_Tel	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_Tgif	PROTEIN_M_Tgif	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UMADelta	PROTEIN_M_UMADelta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_UMANrl	PROTEIN_M_UMANrl	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_UMR	PROTEIN_M_UMR	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_UVA0tx	PROTEIN_M_UVA0tx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqAlx1	PROTEIN_M_UbiqAlx1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqDelta	PROTEIN_M_UbiqDelta	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_UbiqES	PROTEIN_M_UbiqES	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqEts1	PROTEIN_M_UbiqEts1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqGcad	PROTEIN_M_UbiqGcad	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqHesC	PROTEIN_M_UbiqHesC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqHnf6	PROTEIN_M_UbiqHnf6	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqSoxB1	PROTEIN_M_UbiqSoxB1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
	PROTEIN_M_-_UbiqSoxC	PROTEIN_M_UbiqSoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_M_UbiqTel	PROTEIN_M_UbiqTel	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_VEGFR	PROTEIN_M_VEGFR	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_-VEGFSignal	PROTEIN_M_VEGFSignal	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_Wnt8	PROTEIN_M_Wnt8	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_cB	PROTEIN_M_cB	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_-frizzled_a	PROTEIN_M_frizzled_a	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_-frizzled_i	PROTEIN_M_frizzled_i	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_M_z13	PROTEIN_M_z13	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Alx1	PROTEIN_P_Alx1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Apobec	PROTEIN_P_Apobec	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Bra	PROTEIN_P_Bra	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Brn	PROTEIN_P_Brn	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_CAPK	PROTEIN_P_CAPK	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_CyP	PROTEIN_P_CyP	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Delta	PROTEIN_P_Delta	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Delta2	PROTEIN_P_Delta2	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Dpt	PROTEIN_P_Dpt	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Dri	PROTEIN_P_Dri	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Endo16	PROTEIN_P_Endo16	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Erg	PROTEIN_P_Erg	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Ets1	PROTEIN_P_Ets1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Eve	PROTEIN_P_Eve	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_P_Ficolin	PROTEIN_P_Ficolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_FoxA	PROTEIN_P_FoxA	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_FoxB	PROTEIN_P_FoxB	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_FoxN23	PROTEIN_P_FoxN23	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_FoxO	PROTEIN_P_FoxO	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_FvMo	PROTEIN_P_FvMo	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_GSK3_a	PROTEIN_P_GSK3_a	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_GSK3_i	PROTEIN_P_GSK3_i	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_GataC	PROTEIN_P_GataC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_GataE	PROTEIN_P_GataE	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Gcad	PROTEIN_P_Gcad	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Gcm	PROTEIN_P_Gcm	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Gelsolin	PROTEIN_P_Gelsolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Gro	PROTEIN_P_Gro	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_GroTFC	PROTEIN_P_GroTFC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_HesC	PROTEIN_P_HesC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Hex	PROTEIN_P_Hex	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Hox	PROTEIN_P_Hox	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Kakapo	PROTEIN_P_Kakapo	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_L1	PROTEIN_P_L1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Lim	PROTEIN_P_Lim	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Msp130	PROTEIN_P_Msp130	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_MspL	PROTEIN_P_MspL	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Not	PROTEIN_P_Not	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
PROTEIN_P_Notch	PROTEIN_P_Notch	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Notch2	PROTEIN_P_Notch2	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Nrl	PROTEIN_P_Nrl	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_OrCt	PROTEIN_P_OrCt	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Otx	PROTEIN_P_Otx	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Pks	PROTEIN_P_Pks	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Pmar1	PROTEIN_P_Pmar1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Sm27	PROTEIN_P_Sm27	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Sm30	PROTEIN_P_Sm30	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Sm50	PROTEIN_P_Sm50	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Snail	PROTEIN_P_Snail	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_SoxB1	PROTEIN_P_SoxB1	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_SoxC	PROTEIN_P_SoxC	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_SuH	PROTEIN_P_SuH	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_SuHN	PROTEIN_P_SuHN	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_SuTx	PROTEIN_P_SuTx	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_TBr	PROTEIN_P_TBr	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_TCF	PROTEIN_P_TCF	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Tel	PROTEIN_P_Tel	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_Tgif	PROTEIN_P_Tgif	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_-UMADelta	PROTEIN_P_UMADelta	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_UMANrl	PROTEIN_P_UMANrl	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_UVAOtx	PROTEIN_P_UVAOtx	Compartment__cell	mol · l <sup>-1</sup>	□	□
PROTEIN_P_-UbiqAlx1	PROTEIN_P_UbiqAlx1	Compartment__cell	mol · l <sup>-1</sup>	□	□

	Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
	PROTEIN_P_UbiqDelta	PROTEIN_P_UbiqDelta	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqES	PROTEIN_P_UbiqES	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqEts1	PROTEIN_P_UbiqEts1	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqGcad	PROTEIN_P_UbiqGcad	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqHesC	PROTEIN_P_UbiqHesC	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqHnf6	PROTEIN_P_UbiqHnf6	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqSoxB1	PROTEIN_P_UbiqSoxB1	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqSoxC	PROTEIN_P_UbiqSoxC	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_UbiqTel	PROTEIN_P_UbiqTel	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_VEGFR	PROTEIN_P_VEGFR	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_VEGFSignal	PROTEIN_P_VEGFSignal	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_Wnt8	PROTEIN_P_Wnt8	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_cB	PROTEIN_P_cB	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_frizzled_a	PROTEIN_P_frizzled_a	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_frizzled_i	PROTEIN_P_frizzled_i	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_nBTcf	PROTEIN_P_nBTcf	Compartment_cell	mol · l <sup>-1</sup>	☐	☐
	PROTEIN_P_z13	PROTEIN_P_z13	Compartment_cell	mol · l <sup>-1</sup>	☐	☐

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_E_Alx1	mRNA_E_Alx1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Apobec	mRNA_E_Apobec	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Blimp1	mRNA_E_Blimp1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Bra	mRNA_E_Bra	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Brn	mRNA_E_Brn	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_CAPK	mRNA_E_CAPK	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_CyP	mRNA_E_CyP	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Delta	mRNA_E_Delta	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Dpt	mRNA_E_Dpt	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Dri	mRNA_E_Dri	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_ES	mRNA_E_ES	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Endo16	mRNA_E_Endo16	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Erg	mRNA_E_Erg	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Ets1	mRNA_E_Ets1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Eve	mRNA_E_Eve	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Ficolin	mRNA_E_Ficolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_FoxA	mRNA_E_FoxA	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_FoxB	mRNA_E_FoxB	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_FoxN23	mRNA_E_FoxN23	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_FoxO	mRNA_E_FoxO	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_FvMo	mRNA_E_FvMo	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_GataC	mRNA_E_GataC	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_GataE	mRNA_E_GataE	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Gcad	mRNA_E_Gcad	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Gcm	mRNA_E_Gcm	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Gelsolin	mRNA_E_Gelsolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_HesC	mRNA_E_HesC	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_E_Hex	mRNA_E_Hex	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Hnf6	mRNA_E_Hnf6	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Hox	mRNA_E_Hox	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Kakapo	mRNA_E_Kakapo	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Lim	mRNA_E_Lim	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Msp130	mRNA_E_Msp130	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_MspL	mRNA_E_MspL	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Not	mRNA_E_Not	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Notch	mRNA_E_Notch	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Nrl	mRNA_E_Nrl	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_OrCt	mRNA_E_OrCt	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Otx	mRNA_E_Otx	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Pks	mRNA_E_Pks	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Pmar1	mRNA_E_Pmar1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Sm27	mRNA_E_Sm27	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Sm30	mRNA_E_Sm30	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Sm50	mRNA_E_Sm50	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Snail	mRNA_E_Snail	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_SoxB1	mRNA_E_SoxB1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_SoxC	mRNA_E_SoxC	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_SuH	mRNA_E_SuH	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_SuTx	mRNA_E_SuTx	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_TBr	mRNA_E_TBr	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Tel	mRNA_E_Tel	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Tgif	mRNA_E_Tgif	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_UMR	mRNA_E_UMR	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_UVAOtx	mRNA_E_UVAOtx	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_E_UbiqSoxB1	mRNA_E_UbiqSoxB1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_VEGF	mRNA_E_VEGF	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_VEGFR	mRNA_E_VEGFR	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_Wnt8	mRNA_E_Wnt8	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_cB	mRNA_E_cB	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_E_z13	mRNA_E_z13	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Alx1	mRNA_M_Alx1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Apobec	mRNA_M_Apobec	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Blimp1	mRNA_M_Blimp1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Bra	mRNA_M_Bra	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Brn	mRNA_M_Brn	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_CAPK	mRNA_M_CAPK	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_CyP	mRNA_M_CyP	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Delta	mRNA_M_Delta	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Dpt	mRNA_M_Dpt	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Dri	mRNA_M_Dri	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Endo16	mRNA_M_Endo16	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Erg	mRNA_M_Erg	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Ets1	mRNA_M_Ets1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Eve	mRNA_M_Eve	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Ficolin	mRNA_M_Ficolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_FoxA	mRNA_M_FoxA	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_FoxB	mRNA_M_FoxB	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_FoxN23	mRNA_M_FoxN23	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_FoxO	mRNA_M_FoxO	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_FvMo	mRNA_M_FvMo	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_GataC	mRNA_M_GataC	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_M_GataE	mRNA_M_GataE	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Gcad	mRNA_M_Gcad	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Gcm	mRNA_M_Gcm	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Gelsolin	mRNA_M_Gelsolin	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_HesC	mRNA_M_HesC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Hex	mRNA_M_Hex	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Hnf6	mRNA_M_Hnf6	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Hox	mRNA_M_Hox	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Kakapo	mRNA_M_Kakapo	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Lim	mRNA_M_Lim	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Msp130	mRNA_M_Msp130	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_MspL	mRNA_M_MspL	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Not	mRNA_M_Not	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Notch	mRNA_M_Notch	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Nrl	mRNA_M_Nrl	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_OrCt	mRNA_M_OrCt	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Otx	mRNA_M_Otx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Pks	mRNA_M_Pks	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Pmar1	mRNA_M_Pmar1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Sm27	mRNA_M_Sm27	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Sm30	mRNA_M_Sm30	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Sm50	mRNA_M_Sm50	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_Snail	mRNA_M_Snail	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_SoxB1	mRNA_M_SoxB1	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_SoxC	mRNA_M_SoxC	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_SuH	mRNA_M_SuH	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_M_SuTx	mRNA_M_SuTx	Compartment__cell	$\text{mol} \cdot \text{l}^{-1}$	<input type="checkbox"/>	<input type="checkbox"/>

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_M_TBr	mRNA_M_TBr	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Tel	mRNA_M_Tel	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Tgif	mRNA_M_Tgif	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_UMADelta	mRNA_M_UMADelta	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_UMANrl	mRNA_M_UMANrl	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_UMR	mRNA_M_UMR	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_UbiqSoxB1	mRNA_M_UbiqSoxB1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_VEGFR	mRNA_M_VEGFR	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_Wnt8	mRNA_M_Wnt8	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_cB	mRNA_M_cB	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_M_z13	mRNA_M_z13	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Alx1	mRNA_P_Alx1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Apobec	mRNA_P_Apobec	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Blimp1	mRNA_P_Blimp1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Bra	mRNA_P_Bra	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Brn	mRNA_P_Brn	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_CAPK	mRNA_P_CAPK	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_CyP	mRNA_P_CyP	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Delta	mRNA_P_Delta	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Dpt	mRNA_P_Dpt	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Dri	mRNA_P_Dri	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Endo16	mRNA_P_Endo16	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Erg	mRNA_P_Erg	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Ets1	mRNA_P_Ets1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Eve	mRNA_P_Eve	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Ficolin	mRNA_P_Ficolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_FoxA	mRNA_P_FoxA	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_P_FoxB	mRNA_P_FoxB	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_FoxN23	mRNA_P_FoxN23	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_FoxO	mRNA_P_FoxO	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_FvMo	mRNA_P_FvMo	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_GataC	mRNA_P_GataC	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_GataE	mRNA_P_GataE	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Gcad	mRNA_P_Gcad	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Gcm	mRNA_P_Gcm	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Gelsolin	mRNA_P_Gelsolin	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_HesC	mRNA_P_HesC	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Hex	mRNA_P_Hex	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Hnf6	mRNA_P_Hnf6	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Hox	mRNA_P_Hox	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Kakapo	mRNA_P_Kakapo	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_L1	mRNA_P_L1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Lim	mRNA_P_Lim	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Msp130	mRNA_P_Msp130	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_MspL	mRNA_P_MspL	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Not	mRNA_P_Not	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Nrl	mRNA_P_Nrl	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_OrCt	mRNA_P_OrCt	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Otx	mRNA_P_Otx	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Pks	mRNA_P_Pks	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Pmar1	mRNA_P_Pmar1	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Sm27	mRNA_P_Sm27	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Sm30	mRNA_P_Sm30	Compartment__cell	mol · l <sup>-1</sup>	□	□
mRNA_P_Sm50	mRNA_P_Sm50	Compartment__cell	mol · l <sup>-1</sup>	□	□

Id	Name	Compartment	Derived Unit	Constant	Boundary Condition
mRNA_P_Snail	mRNA_P_Snail	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_SoxB1	mRNA_P_SoxB1	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_SoxC	mRNA_P_SoxC	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_SuTx	mRNA_P_SuTx	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_TBr	mRNA_P_TBr	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_Tel	mRNA_P_Tel	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_Tgif	mRNA_P_Tgif	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqAlx1	mRNA_P_UbiqAlx1	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqES	mRNA_P_UbiqES	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqEts1	mRNA_P_UbiqEts1	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqHesC	mRNA_P_UbiqHesC	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqHnf6	mRNA_P_UbiqHnf6	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqSoxC	mRNA_P_UbiqSoxC	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_UbiqTel	mRNA_P_UbiqTel	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_VEGFR	mRNA_P_VEGFR	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_Wnt8	mRNA_P_Wnt8	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_cB	mRNA_P_cB	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
mRNA_P_z13	mRNA_P_z13	Compartment_cell	mol·l <sup>-1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
ribosome	ribosome	Compartment_cell	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
none	none	Compartment_outside	mol·l <sup>-1</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## 5 Parameters

This model contains 66 global parameters.

Table 4: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
E_Notch_S2	E_Notch_S2		1.0		☒
E_Notch_S1	E_Notch_S1		0.0		☒
E_Otx_S1	E_Otx_S1		1.0		☒
E_Otx_S2	E_Otx_S2		0.0		☒
E_SoxB1_S1	E_SoxB1_S1		1.0		☒
E_SoxB1_S2	E_SoxB1_S2		0.0		☒
E_SuH_S2	E_SuH_S2		1.0		☒
E_SuH_S1	E_SuH_S1		0.0		☒
E_UMR_S2	E_UMR_S2		1.0		☒
E_UMR_S1	E_UMR_S1		0.0		☒
E_UVA0tx_S2	E_UVA0tx_S2		1.0		☒
E_UVA0tx_S1	E_UVA0tx_S1		0.0		☒
E_UbiqSoxB1-_S1	E_UbiqSoxB1_S1		1.0		☒
E_UbiqSoxB1-_S2	E_UbiqSoxB1_S2		0.0		☒
E_VEGF_S2	E_VEGF_S2		1.0		☒
E_VEGF_S1	E_VEGF_S1		0.0		☒
E_cB_S1	E_cB_S1		1.0		☒
E_cB_S2	E_cB_S2		0.0		☒
E_Gcad_S1	E_Gcad_S1		1.0		☒
E_Gcad_S2	E_Gcad_S2		0.0		☒
M_UMANrl_S2	M_UMANrl_S2		1.0		☒
M_UMANrl_S1	M_UMANrl_S1		0.0		☒
P_L1_S2	P_L1_S2		1.0		☒
P_L1_S1	P_L1_S1		0.0		☒
M_UMADelta-_S2	M_UMADelta_S2		1.0		☒
M_UMADelta-_S1	M_UMADelta_S1		0.0		☒
M_UMR_S2	M_UMR_S2		1.0		☒
M_UMR_S1	M_UMR_S1		0.0		☒
M_SuH_S2	M_SuH_S2		1.0		☒
M_SuH_S1	M_SuH_S1		0.0		☒
M_Notch_S1	M_Notch_S1		1.0		☒
M_Notch_S2	M_Notch_S2		0.0		☒

Id	Name	SBO	Value	Unit	Constant
P_UbiqAlx1-_S1	P_UbiqAlx1_S1		1.0		☒
P_UbiqAlx1-_S2	P_UbiqAlx1_S2		0.0		☒
P_UbiqEts1-_S1	P_UbiqEts1_S1		1.0		☒
P_UbiqEts1-_S2	P_UbiqEts1_S2		0.0		☒
P_UbiqHnf6-_S1	P_UbiqHnf6_S1		1.0		☒
P_UbiqHnf6-_S2	P_UbiqHnf6_S2		0.0		☒
P_UbiqTel_S1	P_UbiqTel_S1		1.0		☒
P_UbiqTel_S2	P_UbiqTel_S2		0.0		☒
M_Gcad_S1	M_Gcad_S1		1.0		☒
M_Gcad_S2	M_Gcad_S2		0.0		☒
P_Gcad_S1	P_Gcad_S1		1.0		☒
P_Gcad_S2	P_Gcad_S2		0.0		☒
P_UbiqES_S1	P_UbiqES_S1		1.0		☒
P_UbiqES_S2	P_UbiqES_S2		0.0		☒
P_UbiqSoxC-_S1	P_UbiqSoxC_S1		1.0		☒
P_UbiqSoxC-_S2	P_UbiqSoxC_S2		0.0		☒
E_UbiqSoxC-_S1	P_UbiqSoxC_S1		1.0		☒
E_UbiqSoxC-_S2	P_UbiqSoxC_S2		0.0		☒
P_Otx_S1	P_Otx_S1		1.0		☒
P_Otx_S2	P_Otx_S2		0.0		☒
M_SoxB1_S1	M_SoxB1_S1		1.0		☒
M_SoxB1_S2	M_SoxB1_S2		0.0		☒
P_cB_S1	P_cB_S1		1.0		☒
P_cB_S2	P_cB_S2		0.0		☒
M_UbiqSoxB1-_S1	M_UbiqSoxB1_S1		1.0		☒
M_UbiqSoxB1-_S2	M_UbiqSoxB1_S2		0.0		☒
P_UbiqHesC-_S1	P_UbiqHesC_S1		1.0		☒
P_UbiqHesC-_S2	P_UbiqHesC_S2		0.0		☒

<b>Id</b>	<b>Name</b>	<b>SBO</b>	<b>Value</b>	<b>Unit</b>	<b>Constant</b>
P_Ets1_S1	P_Ets1_S1		1.0		<input type="checkbox"/>
P_Ets1_S2	P_Ets1_S2		0.0		<input type="checkbox"/>
M_cB_S1	M_cB_S1		1.0		<input type="checkbox"/>
M_cB_S2	M_cB_S2		0.0		<input type="checkbox"/>
M_Otx_S1	M_Otx_S1		1.0		<input type="checkbox"/>
M_Otx_S2	M_Otx_S2		0.0		<input type="checkbox"/>

## 6 Events

This is an overview of 14 events. Each event is initiated whenever its trigger condition switches from `false` to `true`. A delay function postpones the effects of an event to a later time point. At the time of execution, an event can assign values to species, parameters or compartments if these are not set to constant.

### 6.1 Event e24

**Name** e24

**Trigger condition**

$$\text{time} \geq 24 \quad (1)$$

**Delay**

$$0 \quad (2)$$

**Assignments**

$$\text{E_VEGF\_S2} = 0 \quad (3)$$

$$\text{E_VEGF\_S1} = 1 \quad (4)$$

$$\text{E_SuH\_S2} = 0 \quad (5)$$

$$\text{E_SuH\_S1} = 1 \quad (6)$$

$$\text{M_U MANr1\_S2} = 0 \quad (7)$$

$$\text{M_U MANr1\_S1} = 1 \quad (8)$$

### 6.2 Event e21

**Name** e21

**Trigger condition**

$$\text{time} \geq 21 \quad (9)$$

**Delay**

$$0 \quad (10)$$

## Assignments

$$E\_Notch\_S1 = 1 \quad (11)$$

$$E\_Notch\_S2 = 0 \quad (12)$$

$$P\_L1\_S1 = 1 \quad (13)$$

$$P\_L1\_S2 = 0 \quad (14)$$

## 6.3 Event e19

**Name** e19

**Trigger condition**

$$\text{time} \geq 19 \quad (15)$$

**Delay**

$$0 \quad (16)$$

## Assignments

$$M\_UMADelta\_S1 = 1 \quad (17)$$

$$M\_UMADelta\_S2 = 0 \quad (18)$$

## 6.4 Event e18

**Name** e18

**Trigger condition**

$$\text{time} \geq 18 \quad (19)$$

**Delay**

$$0 \quad (20)$$

## Assignments

$$E\_UVAOtx\_S1 = 1 \quad (21)$$

$$E\_UVAOtx\_S2 = 0 \quad (22)$$

## 6.5 Event e15

**Name** e15

**Trigger condition**

$$\text{time} \geq 15 \quad (23)$$

**Delay**

$$0 \quad (24)$$

## Assignments

$$E\_UMR\_S1 = 1 \quad (25)$$

$$E\_UMR\_S2 = 0 \quad (26)$$

$$M\_UMR\_S1 = 1 \quad (27)$$

$$M\_UMR\_S2 = 0 \quad (28)$$

$$P\_Otx\_S1 = 1 \quad (29)$$

$$P\_Otx\_S2 = 0 \quad (30)$$

## 6.6 Event e12

**Name** e12

**Trigger condition**

$$\text{time} \geq 12 \quad (31)$$

**Delay**

$$0 \quad (32)$$

## Assignments

$$M\_SuH\_S1 = 1 \quad (33)$$

$$M\_SuH\_S2 = 0 \quad (34)$$

## 6.7 Event e30

**Name** e30

**Trigger condition**

$$\text{time} \geq 30 \quad (35)$$

**Delay**

$$0 \quad (36)$$

## Assignments

$E\_VEGF\_S2 = 1$	(37)
$E\_VEGF\_S1 = 0$	(38)
$E\_SuH\_S2 = 1$	(39)
$E\_SuH\_S1 = 0$	(40)
$M\_UMANrl\_S2 = 1$	(41)
$M\_UMANrl\_S1 = 0$	(42)
$E\_Notch\_S2 = 1$	(43)
$E\_Notch\_S1 = 0$	(44)
$P\_L1\_S2 = 1$	(45)
$P\_L1\_S1 = 0$	(46)
$M\_UMADelta\_S2 = 1$	(47)
$M\_UMADelta\_S1 = 0$	(48)
$E\_UVAOtx\_S2 = 1$	(49)
$E\_UVAOtx\_S1 = 0$	(50)
$M\_Notch\_S1 = 0$	(51)
$M\_Notch\_S2 = 1$	(52)
$P\_UbiqAlx1\_S1 = 0$	(53)
$P\_UbiqAlx1\_S2 = 1$	(54)
$P\_UbiqEts1\_S1 = 0$	(55)
$P\_UbiqEts1\_S2 = 1$	(56)
$M\_SuH\_S2 = 1$	(57)
$M\_SuH\_S1 = 0$	(58)
$E\_UMR\_S2 = 1$	(59)
$E\_UMR\_S1 = 0$	(60)
$M\_UMR\_S2 = 1$	(61)
$M\_UMR\_S1 = 0$	(62)

## 6.8 Event e23

**Name** e23

**Trigger condition**

$$\text{time} \geq 23 \quad (63)$$

**Delay**

$$0 \quad (64)$$

## Assignments

$$P\_UbiqHnf6\_S1 = 0 \quad (65)$$

$$P\_UbiqHnf6\_S2 = 1 \quad (66)$$

## 6.9 Event e29

**Name** e29

**Trigger condition**

$$\text{time} \geq 29 \quad (67)$$

**Delay**

$$0 \quad (68)$$

## Assignments

$$P\_UbiqTel\_S2 = 1 \quad (69)$$

$$P\_UbiqTel\_S1 = 0 \quad (70)$$

## 6.10 Event e20

**Name** e20

**Trigger condition**

$$\text{time} \geq 20 \quad (71)$$

**Delay**

$$0 \quad (72)$$

## Assignments

$$M\_Gcad\_S1 = 0 \quad (73)$$

$$M\_Gcad\_S2 = 1 \quad (74)$$

$$P\_Gcad\_S1 = 0 \quad (75)$$

$$P\_Gcad\_S2 = 1 \quad (76)$$

$$P\_UbiqES\_S1 = 0 \quad (77)$$

$$P\_UbiqES\_S2 = 1 \quad (78)$$

## 6.11 Event e17

**Name** e17

<b>Trigger condition</b>	$\text{time} \geq 17$	(79)
<b>Delay</b>	0	(80)
<b>Assignments</b>		
P_UbiqSoxC_S2 = 1		(81)
P_UbiqSoxC_S1 = 0		(82)
E_UbiqSoxC_S2 = 1		(83)
E_UbiqSoxC_S1 = 0		(84)

## 6.12 Event e14

<b>Name</b>	e14	
<b>Trigger condition</b>	$\text{time} \geq 14$	(85)
<b>Delay</b>	0	(86)
<b>Assignments</b>		
E_SoxB1_S1 = 0		(87)
E_SoxB1_S2 = 1		(88)
M_SoxB1_S1 = 0		(89)
M_SoxB1_S2 = 1		(90)
P_cB_S1 = 0		(91)
P_cB_S2 = 1		(92)
M_UbiqSoxB1_S1 = 0		(93)
M_UbiqSoxB1_S2 = 1		(94)

## 6.13 Event e8

<b>Name</b>	e8	
<b>Trigger condition</b>	$\text{time} \geq 8$	(95)
<b>Delay</b>	0	(96)
<b>Assignments</b>		
P_UbiqHesC_S2 = 1		(97)
P_UbiqHesC_S1 = 0		(98)

## 6.14 Event e11

**Name** e11

**Trigger condition**

$$\text{time} \geq 11 \quad (99)$$

**Delay**

$$0 \quad (100)$$

**Assignments**

$$\text{P_Ets1\_S1} = 0 \quad (101)$$

$$\text{P_Ets1\_S2} = 1 \quad (102)$$

$$\text{E_cB\_S1} = 0 \quad (103)$$

$$\text{E_cB\_S2} = 1 \quad (104)$$

$$\text{M_cB\_S1} = 0 \quad (105)$$

$$\text{M_cB\_S2} = 1 \quad (106)$$

$$\text{E_Gcad\_S1} = 0 \quad (107)$$

$$\text{E_Gcad\_S2} = 1 \quad (108)$$

$$\text{E_Otx\_S1} = 0 \quad (109)$$

$$\text{E_Otx\_S2} = 1 \quad (110)$$

$$\text{M_Otx\_S1} = 0 \quad (111)$$

$$\text{M_Otx\_S2} = 1 \quad (112)$$

## 7 Reactions

This model contains 778 reactions. All reactions are listed in the following table and are subsequently described in detail. If a reaction is affected by a modifier, the identifier of this species is written above the reaction arrow.

Table 5: Overview of all reactions

Nº	Id	Name	Reaction Equation	SBO
1	E_Gcad_Hill-Kinetic_0	E_Gcad_Hill_Kinetic	PRE_E_Gcad → mRNA_E_Gcad	
2	E_Notch_Hill-Kinetic_0	E_Notch_Hill_Kinetic	PRE_E_Notch → mRNA_E_Notch	
3	E_Otx_Hill-Kinetic_0	E_Otx_Hill_Kinetic	PRE_E_Otx → mRNA_E_Otx	
4	E_SoxB1_Hill-Kinetic_0	E_SoxB1_Hill_Kinetic	PRE_E_SoxB1 → mRNA_E_SoxB1	
5	E_SuH_Hill-Kinetic_0	E_SuH_Hill_Kinetic	PRE_E_SuH → mRNA_E_SuH	
6	E_UMR_Hill-Kinetic_0	E_UMR_Hill_Kinetic	PRE_E_UMR → mRNA_E_UMR	
7	E_UVAOtx_Hill-Kinetic_0	E_UVAOtx_Hill_Kinetic	PRE_E_UVAOtx → mRNA_E_UVAOtx	
8	E_UbiqSoxB1_Hill-Kinetic_0	E_UbiqSoxB1_Hill_Kinetic	PRE_E_UbiqSoxB1 → mRNA_E_UbiqSoxB1	
9	E_VEGF_Hill-Kinetic_0	E_VEGF_Hill_Kinetic	PRE_E_VEGF → mRNA_E_VEGF	
10	E_cB_Hill-Kinetic_0	E_cB_Hill_Kinetic	PRE_E_cB → mRNA_E_cB	

Nº	Id	Name	Reaction Equation	SBO
11	GENE_E_Alx1-_transcription_0	GENE_E_Alx1_transcription	GENE_E_Alx1 $\xrightarrow{\text{PROTEIN\_E\_Ets1, PROTEIN\_E\_UbiqAlx1, PROTEIN\_E\_Tgif, PROTEIN\_E\_Bra, PROTEIN\_E\_Hox}}$	mRNA_E_Alx1
12	GENE_E_Apobec-_transcription_0	GENE_E_Apobec_transcription	GENE_E_Apobec $\xrightarrow{\text{PROTEIN\_E\_Bra, PROTEIN\_E\_Hox}}$	mRNA_E_Apobec
13	GENE_E_Blimp1-_transcription_0	GENE_E_Blimp1_transcription	GENE_E_Blimp1 $\xrightarrow{\text{PROTEIN\_E\_Otx, PROTEIN\_E\_Brn, PROTEIN\_E\_GataE, PROTEIN\_E\_Dri, PROTEIN\_E\_Ets1, PROTEIN\_E\_Hox}}$	mRNA_E_Blimp1
14	GENE_E_Bra-_transcription_0	GENE_E_Bra_transcription	GENE_E_Bra $\xrightarrow{\text{PROTEIN\_E\_GataE, PROTEIN\_E\_nBTCF, PROTEIN\_E\_Otx, PROTEIN\_E\_SoxB1}}$	mRNA_E_Bra
15	GENE_E_Brn-_transcription_0	GENE_E_Brn_transcription	GENE_E_Brn $\xrightarrow{\text{PROTEIN\_E\_GataE}}$	mRNA_E_Brn
16	GENE_E_CyP-_transcription_0	GENE_E_CyP_transcription	GENE_E_CyP $\xrightarrow{\text{PROTEIN\_E\_Dri, PROTEIN\_E\_Ets1, PROTEIN\_E\_SoxB1}}$	mRNA_E_CyP
17	GENE_E_Delta-_transcription_0	GENE_E_Delta_transcription	GENE_E_Delta $\xrightarrow{\text{PROTEIN\_E\_UbiqDelta, PROTEIN\_E\_UMADelta, PROTEIN\_E\_Ets1}}$	mRNA_E_Delta
18	GENE_E_Dpt-_transcription_0	GENE_E_Dpt_transcription	GENE_E_Dpt $\xrightarrow{\text{PROTEIN\_E\_Gcm}}$	mRNA_E_Dpt

Nº	Id	Name	Reaction Equation	SBO
19	GENE_E_Dri-_transcription_0	GENE_E.Dri_transcription	GENE_E.Dri $\xrightarrow{\text{PROTEIN\_E\_Alx1, PROTEIN\_E\_Ets1}}$ mRNA_E.Dri	
20	GENE_E_ES-_transcription_0	GENE_E_ES_transcription	GENE_E_ES $\xrightarrow{\text{PROTEIN\_E\_Dri, PROTEIN\_E\_UbiqES, PROTEIN\_E\_HesC}}$ mRNA_E.E	
21	GENE_E_Endo16-_transcription_0	GENE_E.Endo16_transcription	GENE_E.Endo16 $\xrightarrow{\text{PROTEIN\_E\_Otx, PROTEIN\_E\_Brn}}$ mRNA_E.Endo16	
22	GENE_E_Erg-_transcription_0	GENE_E.Erg_transcription	GENE_E.Erg $\xrightarrow{\text{PROTEIN\_E\_TBr, PROTEIN\_E\_Ets1, PROTEIN\_E\_Hex}}$ mRNA_E.Erg	
23	GENE_E_Ets1-_transcription_0	GENE_E.Ets1_transcription	GENE_E.Ets1 $\xrightarrow{\text{PROTEIN\_E\_UbiqEts1, PROTEIN\_E\_HesC}}$ mRNA_E.Ets1	
24	GENE_E_Eve-_transcription_0	GENE_E.Eve_transcription	GENE_E.Eve $\xrightarrow{\text{PROTEIN\_E\_Blimp1, PROTEIN\_E\_nBTCF, PROTEIN\_E\_GroTCF, PR}}$	
25	GENE_E_Ficolin-_transcription_0	GENE_E.Ficolin_transcription	GENE_E.Ficolin $\xrightarrow{\text{PROTEIN\_E\_Ets1, PROTEIN\_E\_Hnf6, PROTEIN\_E\_Hex, PROTEIN}}$	
26	GENE_E_FoxA-_transcription_0	GENE_E.FoxA_transcription	GENE_E.FoxA $\xrightarrow{\text{PROTEIN\_E\_GataE, PROTEIN\_E\_nBTCF, PROTEIN\_E\_Otx, PROTEIN}}$	

Nº	Id	Name	Reaction Equation	SBO
27	GENE_E_FoxB-_transcription_0	GENE_E_FoxB_transcription	GENE_E_FoxB $\xrightarrow{\text{PROTEIN\_E\_Alx1, PROTEIN\_E\_Ets1, PROTEIN\_E\_TBr, PROTEIN\_E\_Tcf}}$	
28	GENE_E_FoxN23-_transcription_0	GENE_E_FoxN23_transcription	GENE_E_FoxN23 $\xrightarrow{\text{PROTEIN\_E\_nBTCF}}$ mRNA_E_FoxN23	
29	GENE_E_FoxO-_transcription_0	GENE_E_FoxO_transcription	GENE_E_FoxO $\xrightarrow{\text{PROTEIN\_E\_Ets1, PROTEIN\_E\_Hex, PROTEIN\_E\_Tgif, PROTEIN\_E\_Tcf}}$	
30	GENE_E_FvMo-_transcription_0	GENE_E_FvMo_transcription	GENE_E_FvMo $\xrightarrow{\text{PROTEIN\_E\_Gcm, PROTEIN\_E\_GataE}}$ mRNA_E_FvMo	
31	GENE_E_GataC-_transcription_0	GENE_E_GataC_transcription	GENE_E_GataC $\xrightarrow{\text{PROTEIN\_E\_GataE, PROTEIN\_E\_Hnf6, PROTEIN\_GCM, PROTEIN\_E\_Tcf}}$	
32	GENE_E_GataE-_transcription_0	GENE_E_GataE_transcription	GENE_E_GataE $\xrightarrow{\text{PROTEIN\_E\_Otx, PROTEIN\_E\_SuHN, PROTEIN\_E\_Hox}}$ mRNA_E_GataE	
33	GENE_E_Gcad-_transcription_0	GENE_E_Gcad_transcription	GENE_E_Gcad $\xrightarrow{\text{PROTEIN\_E\_UbiqGcad, PROTEIN\_E\_Snail}}$ mRNA_E_Gcad	
34	GENE_E_Gcm-_transcription_0	GENE_E_Gcm_transcription	GENE_E_Gcm $\xrightarrow{\text{PROTEIN\_E\_nBTCF, PROTEIN\_E\_SuHN, PROTEIN\_E\_Gcm, PROTEIN\_E\_Tcf}}$	

Nº	Id	Name	Reaction Equation	SBO
35	GENE_E-Gelsolin-transcription_0	GENE_E_Gelsolin_transcription	GENE_E_Gelsolin $\xrightarrow{\text{PROTEIN\_E\_Bra}}$ mRNA_E_Gelsolin	
36	GENE_E_HesC-transcription_0	GENE_E_HesC_transcription	GENE_E_HesC $\xrightarrow{\text{PROTEIN\_E\_UbiqHesC}, \text{PROTEIN\_E\_Pmar1}}$ mRNA_E_HesC	
37	GENE_E_Hex-transcription_0	GENE_E_Hex_transcription	GENE_E_Hex $\xrightarrow{\text{PROTEIN\_E\_Tgif}, \text{PROTEIN\_E\_Ets1}, \text{PROTEIN\_E\_Erg}}$ mRNA_E_Hex	
38	GENE_E_Hnf6-transcription_0	GENE_E_Hnf6_transcription	GENE_E_Hnf6 $\xrightarrow{\text{PROTEIN\_E\_UbiqHnf6}}$ mRNA_E_Hnf6	
39	GENE_E_Hox-transcription_0	GENE_E_Hox_transcription	GENE_E_Hox $\xrightarrow{\text{PROTEIN\_E\_Blimp1}, \text{PROTEIN\_E\_nBTCF}, \text{PROTEIN\_E\_Eve}, \text{PROTEIN\_E\_Dfd}}$ mRNA_E_Hox	
40	GENE_E_Kakapo-transcription_0	GENE_E_Kakapo_transcription	GENE_E_Kakapo $\xrightarrow{\text{PROTEIN\_E\_Bra}}$ mRNA_E_Kakapo	
41	GENE_E_Lim-transcription_0	GENE_E_Lim_transcription	GENE_E_Lim $\xrightarrow{\text{PROTEIN\_E\_GataE}, \text{PROTEIN\_E\_Otx}}$ mRNA_E_Lim	
42	GENE_E_Msp130-transcription_0	GENE_E_Msp130_transcription	GENE_E_Msp130 $\xrightarrow{\text{PROTEIN\_E\_Hnf6}, \text{PROTEIN\_E\_FoxB}, \text{PROTEIN\_E\_Ets1}, \text{PROTEIN\_E\_Dfd}}$ mRNA_E_Msp130	

Nº	Id	Name	Reaction Equation	SBO
43	GENE_E_MspL-_transcription_0	GENE_E_MspL_transcription	GENE_E_MspL $\xrightarrow{\text{PROTEIN\_E\_Ets1, PROTEIN\_E\_Alx1, PROTEIN\_E\_VEGFSignal, PROTEIN\_E\_GataE}}$	
44	GENE_E_Not-_transcription_0	GENE_E_Not_transcription	GENE_E_Not $\xrightarrow{\text{PROTEIN\_E\_GataE}}$	mRNA_E_Not
45	GENE_E_Nrl-_transcription_0	GENE_E_Nrl_transcription	GENE_E_Nrl $\xrightarrow{\text{PROTEIN\_E\_TBr, PROTEIN\_E\_UMANrl, PROTEIN\_E\_FoxN23, PROTEIN\_E\_GataE}}$	
46	GENE_E_OrCt-_transcription_0	GENE_E_OrCt_transcription	GENE_E_OrCt $\xrightarrow{\text{PROTEIN\_E\_Bra, PROTEIN\_E\_Hox}}$	mRNA_E_OrCt
47	GENE_E_Otx-_transcription_0	GENE_E_Otx_transcription	GENE_E_Otx $\xrightarrow{\text{PROTEIN\_E\_UVAOtx, PROTEIN\_E\_Blimp1, PROTEIN\_E\_GataE, PROTEIN\_E\_GataE}}$	
48	GENE_E_Pks-_transcription_0	GENE_E_Pks_transcription	GENE_E_Pks $\xrightarrow{\text{PROTEIN\_E\_Gcm, PROTEIN\_E\_GataE}}$	mRNA_E_Pks
49	GENE_E_Pmar1-_transcription_0	GENE_E_Pmar1_transcription	GENE_E_Pmar1 $\xrightarrow{\text{PROTEIN\_E\_nBTCF, PROTEIN\_E\_Otx, PROTEIN\_E\_GroTCF}}$	mRNA_E_Pmar1
50	GENE_E_Sm27-_transcription_0	GENE_E_Sm27_transcription	GENE_E_Sm27 $\xrightarrow{\text{PROTEIN\_E\_Dri, PROTEIN\_E\_Hnf6, PROTEIN\_E\_Ets1, PROTEIN\_E\_GataE}}$	

Nº	Id	Name	Reaction Equation	SBO
51	GENE_E_Sm30-_transcription_0	GENE_E_Sm30_transcription	GENE_E_Sm30 $\xrightarrow{\text{PROTEIN\_E\_VEGFSignal}}$ mRNA_E_Sm30	
52	GENE_E_Sm50-_transcription_0	GENE_E_Sm50_transcription	GENE_E_Sm50 $\xrightarrow{\text{PROTEIN\_E\_Dri, PROTEIN\_E\_Hnf6, PROTEIN\_E\_Ets1, PROTEIN\_E\_SoxC}}$	
53	GENE_E_Snail-_transcription_0	GENE_E_Snail_transcription	GENE_E_Snail $\xrightarrow{\text{PROTEIN\_E\_Hex}}$ mRNA_E_Snail	
54	GENE_E_SoxB1-_transcription_0	GENE_E_SoxB1_transcription	GENE_E_SoxB1 $\xrightarrow{\text{PROTEIN\_E\_UbiqSoxB1, PROTEIN\_E\_SoxB1}}$ mRNA_E_SoxB1	
55	GENE_E_SoxC-_transcription_0	GENE_E_SoxC_transcription	GENE_E_SoxC $\xrightarrow{\text{PROTEIN\_E\_UbiqSoxC, PROTEIN\_E\_HesC, PROTEIN\_E\_SoxC}}$ mRNA_E_SoxC	
56	GENE_E_SuTx-_transcription_0	GENE_E_SuTx_transcription	GENE_E_SuTx $\xrightarrow{\text{PROTEIN\_E\_Gcm, PROTEIN\_E\_GataE}}$ mRNA_E_SuTx	
57	GENE_E_TBr-_transcription_0	GENE_E_TBr_transcription	GENE_E_TBr $\xrightarrow{\text{PROTEIN\_E\_Ets1, PROTEIN\_E\_HesC, PROTEIN\_E\_TBr}}$ mRNA_E_TBr	
58	GENE_E_Tel-_transcription_0	GENE_E_Tel_transcription	GENE_E_Tel $\xrightarrow{\text{PROTEIN\_E\_UbiqTel, PROTEIN\_E\_Tel, PROTEIN\_E\_HesC}}$ mRNA_E_Tel	

Nº	Id	Name	Reaction Equation	SBO
59	GENE_E_Tgif-_transcription_0	GENE_E_Tgif_transcription	GENE_E_Tgif $\xrightarrow{\text{PROTEIN\_E\_Tgif, PROTEIN\_E\_Ets1, PROTEIN\_E\_Erg, PROTEIN\_E\_}}$	
60	GENE_E_VEGFR-_transcription_0	GENE_E_VEGFR_transcription	GENE_E_VEGFR $\xrightarrow{\text{PROTEIN\_E\_Alx1, PROTEIN\_E\_Dri, PROTEIN\_E\_Ets1, PROTEIN\_E\_}}$	
61	GENE_E_Wnt8-_transcription_0	GENE_E_Wnt8_transcription	GENE_E_Wnt8 $\xrightarrow{\text{PROTEIN\_E\_nBTCF, PROTEIN\_E\_Blimp1, PROTEIN\_E\_GroTCF, mRNA\_}}$	
62	GENE_E_z13-_transcription_0	GENE_E_z13_transcription	GENE_E_z13 $\xrightarrow{\text{PROTEIN\_E\_nBTCF, PROTEIN\_E\_GroTCF, PROTEIN\_E\_Hnf6, mRNA\_}}$	
63	GENE_M_Alx1-_transcription_0	GENE_M_Alx1_transcription	GENE_M_Alx1 $\xrightarrow{\text{PROTEIN\_M\_Ets1, PROTEIN\_M\_UbiqAlx1, PROTEIN\_M\_Tgif, PROTEIN\_M\_}}$	
64	GENE_M_Apobec-_transcription_0	GENE_M_Apobec_transcription	GENE_M_Apobec $\xrightarrow{\text{PROTEIN\_M\_Bra, PROTEIN\_E\_Bra, PROTEIN\_M\_Hox, mRNA\_}}$	
65	GENE_M_Blimp1-_transcription_0	GENE_M_Blimp1_transcription	GENE_M_Blimp1 $\xrightarrow{\text{PROTEIN\_M\_Otx, PROTEIN\_M\_Brn, PROTEIN\_M\_GataE, PROTEIN\_M\_}}$	
66	GENE_M_Bra-_transcription_0	GENE_M_Bra_transcription	GENE_M_Bra $\xrightarrow{\text{PROTEIN\_M\_GataE, PROTEIN\_M\_nBTCF, PROTEIN\_M\_Otx, PROTEIN\_M\_}}$	

Nº	Id	Name	Reaction Equation	SBO
67	GENE_M_Brn-_transcription_0	GENE_M_Brn_transcription	GENE_M_Brn $\xrightarrow{\text{PROTEIN\_M\_GataE}}$ mRNA_M_Brn	
68	GENE_M_CAPK-_transcription_0	GENE_M_CAPK_transcription	GENE_M_CAPK $\xrightarrow{\text{PROTEIN\_E\_Bra}}$ mRNA_M_CAPK	
69	GENE_M_CyP-_transcription_0	GENE_M_CyP_transcription	GENE_M_CyP $\xrightarrow{\text{PROTEIN\_M\_Dri, PROTEIN\_M\_Ets1, PROTEIN\_M\_SoxB1}}$ mRNA_M_CyP	
70	GENE_M_Delta-_transcription_0	GENE_M_Delta_transcription	GENE_M_Delta $\xrightarrow{\text{PROTEIN\_M\_UbiqDelta, PROTEIN\_M\_UMADelta, PROTEIN\_M\_E}}$ mRNA_M_Delta	
71	GENE_M_Dpt-_transcription_0	GENE_M_Dpt_transcription	GENE_M_Dpt $\xrightarrow{\text{PROTEIN\_E\_Bra, PROTEIN\_M\_Gcm}}$ mRNA_M_Dpt	
72	GENE_M_Dri-_transcription_0	GENE_M_Dri_transcription	GENE_M_Dri $\xrightarrow{\text{PROTEIN\_M\_Alx1, PROTEIN\_M\_Ets1}}$ mRNA_M_Dri	
73	GENE_M_Endo16-_transcription_0	GENE_M_Endo16_transcription	GENE_M_Endo16 $\xrightarrow{\text{PROTEIN\_M\_Otx, PROTEIN\_M\_Brn}}$ mRNA_M_Endo16	
74	GENE_M_Erg-_transcription_0	GENE_M_Erg_transcription	GENE_M_Erg $\xrightarrow{\text{PROTEIN\_M\_TBr, PROTEIN\_M\_Ets1, PROTEIN\_M\_Hex}}$ mRNA_M_Erg	

Nº	Id	Name	Reaction Equation	SBO
75	GENE_M_Ets1-_transcription_0	GENE_M_Ets1_transcription	GENE_M_Ets1 $\xrightarrow{\text{PROTEIN\_M\_UbiqEts1, PROTEIN\_M\_HesC}}$	mRNA_M_Ets1
76	GENE_M_Eve-_transcription_0	GENE_M_Eve_transcription	GENE_M_Eve $\xrightarrow{\text{PROTEIN\_M\_Blimp1, PROTEIN\_M\_nBTF, PROTEIN\_M\_GroTCF}}$	
77	GENE_M_Ficolin-_transcription_0	GENE_M_Ficolin_transcription	GENE_M_Ficolin $\xrightarrow{\text{PROTEIN\_M\_Ets1, PROTEIN\_M\_Hnf6, PROTEIN\_M\_Hex, PROTEIN\_M\_Otx, PRC}}$	
78	GENE_M_FoxA-_transcription_0	GENE_M_FoxA_transcription	GENE_M_FoxA $\xrightarrow{\text{PROTEIN\_M\_GataE, PROTEIN\_M\_nBTF, PROTEIN\_M\_Otx, PRC}}$	
79	GENE_M_FoxB-_transcription_0	GENE_M_FoxB_transcription	GENE_M_FoxB $\xrightarrow{\text{PROTEIN\_M\_Alx1, PROTEIN\_M\_Ets1, PROTEIN\_M\_TBr, PROTEIN\_M\_Tcf}}$	
80	GENE_M_FoxN23-_transcription_0	GENE_M_FoxN23_transcription	GENE_M_FoxN23 $\xrightarrow{\text{PROTEIN\_M\_nBTF}}$	mRNA_M_FoxN23
81	GENE_M_FoxO-_transcription_0	GENE_M_FoxO_transcription	GENE_M_FoxO $\xrightarrow{\text{PROTEIN\_M\_Ets1, PROTEIN\_M\_Hex, PROTEIN\_M\_Tgif, PROTEIN\_M\_Tcf}}$	
82	GENE_M_FvMo-_transcription_0	GENE_M_FvMo_transcription	GENE_M_FvMo $\xrightarrow{\text{PROTEIN\_M\_Gcm, PROTEIN\_M\_GataE}}$	mRNA_M_FvMo

Nº	Id	Name	Reaction Equation	SBO
83	GENE_M_GataC-_transcription_-0	GENE_M_GataC_transcription	GENE_M_GataC → PROTEIN_M_GataE, PROTEIN_M_Hnf6, PROTEIN_GCM, PROTEIN_Otx, PROTEIN_SuHN, PROTEIN_Hox	mRNA
84	GENE_M_GataE-_transcription_-0	GENE_M_GataE_transcription	GENE_M_GataE → PROTEIN_M_Otx, PROTEIN_M_SuHN, PROTEIN_M_Hox	mRNA
85	GENE_M_Gcad-_transcription_-0	GENE_M_Gcad_transcription	GENE_M_Gcad → PROTEIN_M_UbiqGcad, PROTEIN_M_Snail	mRNA_M_Gcad
86	GENE_M_Gcm-_transcription_-0	GENE_M_Gcm_transcription	GENE_M_Gcm → PROTEIN_M_nBTCF, PROTEIN_M_SuHN, PROTEIN_M_Gcm, PROTEIN_Bra, PROTEIN_E_Bra	mRNA_M_Gcm
87	GENE_M-_Gelsolin-_transcription_-0	GENE_M_Gelsolin_transcription	GENE_M_Gelsolin → PROTEIN_M_Bra, PROTEIN_E_Bra	mRNA_M_Gelsolin
88	GENE_M_HesC-_transcription_-0	GENE_M_HesC_transcription	GENE_M_HesC → PROTEIN_M_UbiqHesC, PROTEIN_M_Pmar1	mRNA_M_HesC
89	GENE_M_Hex-_transcription_-0	GENE_M_Hex_transcription	GENE_M_Hex → PROTEIN_M_Tgif, PROTEIN_M_Ets1, PROTEIN_M_Erg	mRNA_M_Hex
90	GENE_M_Hnf6-_transcription_-0	GENE_M_Hnf6_transcription	GENE_M_Hnf6 → PROTEIN_M_UbiqHnf6	mRNA_M_Hnf6

Nº	Id	Name	Reaction Equation	SBO
91	GENE_M_Hox-_transcription_0	GENE_M_Hox_transcription	GENE_M_Hox $\xrightarrow{\text{PROTEIN\_M\_Blimp1, PROTEIN\_M\_nBCF, PROTEIN\_M\_Eve, PROTEIN\_M\_Hox}}$	
92	GENE_M_Kakapo-_transcription_0	GENE_M_Kakapo_transcription	GENE_M_Kakapo $\xrightarrow{\text{PROTEIN\_M\_Bra, PROTEIN\_E\_Bra}}$	mRNA_M_Kakapo
93	GENE_M_Lim-_transcription_0	GENE_M_Lim_transcription	GENE_M_Lim $\xrightarrow{\text{PROTEIN\_M\_GataE, PROTEIN\_M\_Otx}}$	mRNA_M_Lim
94	GENE_M_Msp130-_transcription_0	GENE_M_Msp130_transcription	GENE_M_Msp130 $\xrightarrow{\text{PROTEIN\_M\_Hnf6, PROTEIN\_M\_FoxB, PROTEIN\_M\_Ets1, PROTEIN\_M\_Sp1}}$	
95	GENE_M_MspL-_transcription_0	GENE_M_MspL_transcription	GENE_M_MspL $\xrightarrow{\text{PROTEIN\_M\_Ets1, PROTEIN\_M\_Alx1, PROTEIN\_M\_VEGFSignal}}$	
96	GENE_M_Not-_transcription_0	GENE_M_Not_transcription	GENE_M_Not $\xrightarrow{\text{PROTEIN\_M\_GataE}}$	mRNA_M_Not
97	GENE_M_Nrl-_transcription_0	GENE_M_Nrl_transcription	GENE_M_Nrl $\xrightarrow{\text{PROTEIN\_M\_TBr, PROTEIN\_M\_UMANrl, PROTEIN\_M\_FoxN23, PROTEIN\_M\_Nrl}}$	
98	GENE_M_OrCt-_transcription_0	GENE_M_OrCt_transcription	GENE_M_OrCt $\xrightarrow{\text{PROTEIN\_M\_Bra, PROTEIN\_E\_Bra, PROTEIN\_M\_Hox}}$	mRNA_M_C

Nº	Id	Name	Reaction Equation	SBO
99	GENE_M_Otx-_transcription_0	GENE_M_Otx_transcription	GENE_M_Otx $\xrightarrow{\text{PROTEIN\_M\_UVAOtx, PROTEIN\_M\_Blimp1, PROTEIN\_M\_GataE, PROTEIN\_M\_Dri, PROTEIN\_M\_Hnf6, PROTEIN\_M\_Ets1, PROTEIN\_M\_GroTCF}}$	
100	GENE_M_Pks-_transcription_0	GENE_M_Pks_transcription	GENE_M_Pks $\xrightarrow{\text{PROTEIN\_E\_Bra, PROTEIN\_M\_Gcm, PROTEIN\_M\_GataE}}$	mRNA_M_Pks
101	GENE_M_Pmar1-_transcription_0	GENE_M_Pmar1_transcription	GENE_M_Pmar1 $\xrightarrow{\text{PROTEIN\_M\_nBTCF, PROTEIN\_M\_Otx, PROTEIN\_M\_GroTCF}}$	mRNA_M_Pmar1
102	GENE_M_Sm27-_transcription_0	GENE_M_Sm27_transcription	GENE_M_Sm27 $\xrightarrow{\text{PROTEIN\_M\_Dri, PROTEIN\_M\_Hnf6, PROTEIN\_M\_Ets1, PROTEIN\_M\_GroTCF}}$	
103	GENE_M_Sm30-_transcription_0	GENE_M_Sm30_transcription	GENE_M_Sm30 $\xrightarrow{\text{PROTEIN\_M\_VEGFSignal}}$	mRNA_M_Sm30
104	GENE_M_Sm50-_transcription_0	GENE_M_Sm50_transcription	GENE_M_Sm50 $\xrightarrow{\text{PROTEIN\_M\_Dri, PROTEIN\_M\_Hnf6, PROTEIN\_M\_Ets1, PROTEIN\_M\_GroTCF}}$	
105	GENE_M_Snail-_transcription_0	GENE_M_Snail_transcription	GENE_M_Snail $\xrightarrow{\text{PROTEIN\_M\_Hex}}$	mRNA_M_Snail
106	GENE_M_SoxB1-_transcription_0	GENE_M_SoxB1_transcription	GENE_M_SoxB1 $\xrightarrow{\text{PROTEIN\_M\_UbiqSoxB1, PROTEIN\_M\_SoxB1}}$	mRNA_M_SoxB1

Nº	Id	Name	Reaction Equation	SBO
107	GENE_M_SoxC-_transcription_0	GENE_M_SoxC_transcription	GENE_M_SoxC $\xrightarrow{\text{PROTEIN\_M\_UbiqSoxC, PROTEIN\_M\_HesC, PROTEIN\_M\_SoxC}}$	r
108	GENE_M_SuTx-_transcription_0	GENE_M_SuTx_transcription	GENE_M_SuTx $\xrightarrow{\text{PROTEIN\_M\_Gcm, PROTEIN\_M\_GataE}}$	mRNA_M_SuTx
109	GENE_M_TBr-_transcription_0	GENE_M_TBr_transcription	GENE_M_TBr $\xrightarrow{\text{PROTEIN\_M\_Ets1, PROTEIN\_M\_HesC, PROTEIN\_M\_TBr}}$	mRNA_M_TBr
110	GENE_M_Tel-_transcription_0	GENE_M_Tel_transcription	GENE_M_Tel $\xrightarrow{\text{PROTEIN\_M\_UbiqTel, PROTEIN\_M\_Tel, PROTEIN\_M\_HesC}}$	mRNA_M_Tel
111	GENE_M_Tgif-_transcription_0	GENE_M_Tgif_transcription	GENE_M_Tgif $\xrightarrow{\text{PROTEIN\_M\_Tgif, PROTEIN\_M\_Ets1, PROTEIN\_M\_Erg, PROTEIN\_M\_GataE}}$	
112	GENE_M_VEGFR-_transcription_0	GENE_M_VEGFR_transcription	GENE_M_VEGFR $\xrightarrow{\text{PROTEIN\_M\_Alx1, PROTEIN\_M\_Dri, PROTEIN\_M\_Ets1, PROTEIN\_M\_Fos, PROTEIN\_M\_GataE}}$	
113	GENE_M_Wnt8-_transcription_0	GENE_M_Wnt8_transcription	GENE_M_Wnt8 $\xrightarrow{\text{PROTEIN\_M\_nBTCF, PROTEIN\_M\_Blimp1, PROTEIN\_M\_GroTCF}}$	
114	GENE_M_z13-_transcription_0	GENE_M_z13_transcription	GENE_M_z13 $\xrightarrow{\text{PROTEIN\_M\_nBTCF, PROTEIN\_M\_GroTCF, PROTEIN\_M\_Hnf6}}$	mRNA_M_z13

Nº	Id	Name	Reaction Equation	SBO
115	GENE_P_Alx1-_transcription_0	GENE_P_Alx1_transcription	GENE_P_Alx1 $\xrightarrow{\text{PROTEIN\_P\_Ets1, PROTEIN\_P\_UbiqAlx1, PROTEIN\_P\_Tgif, PROTEIN\_P\_Bra}}$	
116	GENE_P_Apobec-_transcription_0	GENE_P_Apobec_transcription	GENE_P_Apobec $\xrightarrow{\text{PROTEIN\_P\_Bra, PROTEIN\_P\_Hox}}$	mRNA_P_Apobec
117	GENE_P_Blimp1-_transcription_0	GENE_P_Blimp1_transcription	GENE_P_Blimp1 $\xrightarrow{\text{PROTEIN\_P\_Otx, PROTEIN\_P\_Brn, PROTEIN\_P\_GataE, PROTEIN\_P\_Dri}}$	
118	GENE_P_Bra-_transcription_0	GENE_P_Bra_transcription	GENE_P_Bra $\xrightarrow{\text{PROTEIN\_P\_GataE, PROTEIN\_P\_nBTCF, PROTEIN\_P\_Otx, PROTEIN\_P\_Tgf}}$	
119	GENE_P_Brn-_transcription_0	GENE_P_Brn_transcription	GENE_P_Brn $\xrightarrow{\text{PROTEIN\_P\_GataE}}$	mRNA_P_Brn
120	GENE_P_CyP-_transcription_0	GENE_P_CyP_transcription	GENE_P_CyP $\xrightarrow{\text{PROTEIN\_P\_Dri, PROTEIN\_P\_Ets1, PROTEIN\_P\_SoxB1}}$	mRNA_P_CyP
121	GENE_P_Delta-_transcription_0	GENE_P_Delta_transcription	GENE_P_Delta $\xrightarrow{\text{PROTEIN\_P\_UbiqDelta, PROTEIN\_P\_UMADelta, PROTEIN\_P\_Ets1}}$	
122	GENE_P_Dpt-_transcription_0	GENE_P_Dpt_transcription	GENE_P_Dpt $\xrightarrow{\text{PROTEIN\_P\_Gcm}}$	mRNA_P_Dpt

Nº	Id	Name	Reaction Equation	SBO
123	GENE_P_Dri-_transcription_0	GENE_P_Dri_transcription	GENE_P_Dri $\xrightarrow{\text{PROTEIN\_P\_Alx1, PROTEIN\_P\_Ets1}}$	mRNA_P_Dri
124	GENE_P_Endo16-_transcription_0	GENE_P_Endo16_transcription	GENE_P_Endo16 $\xrightarrow{\text{PROTEIN\_P\_Otx, PROTEIN\_P\_Brn}}$	mRNA_P_Endo16
125	GENE_P_Erg-_transcription_0	GENE_P_Erg_transcription	GENE_P_Erg $\xrightarrow{\text{PROTEIN\_P\_TBr, PROTEIN\_P\_Ets1, PROTEIN\_P\_Hex}}$	mRNA_P_Erg
126	GENE_P_Ets1-_transcription_0	GENE_P_Ets1_transcription	GENE_P_Ets1 $\xrightarrow{\text{PROTEIN\_P\_UbiqEts1, PROTEIN\_P\_Hesc}}$	mRNA_P_Ets1
127	GENE_P_Eve-_transcription_0	GENE_P_Eve_transcription	GENE_P_Eve $\xrightarrow{\text{PROTEIN\_P\_Blimp1, PROTEIN\_P\_nBTCF, PROTEIN\_P\_GroTCF, PROTEIN\_P\_HesC}}$	
128	GENE_P_Ficolin-_transcription_0	GENE_P_Ficolin_transcription	GENE_P_Ficolin $\xrightarrow{\text{PROTEIN\_P\_Ets1, PROTEIN\_P\_Hnf6, PROTEIN\_P\_Hex, PROTEIN\_P\_GataE}}$	
129	GENE_P_FoxA-_transcription_0	GENE_P_FoxA_transcription	GENE_P_FoxA $\xrightarrow{\text{PROTEIN\_P\_GataE, PROTEIN\_P\_nBTCF, PROTEIN\_P\_Otx, PROTEIN\_P\_HesC}}$	
130	GENE_P_FoxB-_transcription_0	GENE_P_FoxB_transcription	GENE_P_FoxB $\xrightarrow{\text{PROTEIN\_P\_Alx1, PROTEIN\_P\_Ets1, PROTEIN\_P\_TBr, PROTEIN\_P\_HesC}}$	

Nº	Id	Name	Reaction Equation	SBO
131	GENE_P_FoxN23-_transcription_-0	GENE_P_FoxN23_transcription	GENE_P_FoxN23 $\xrightarrow{\text{PROTEIN\_P\_nBCF}}$ mRNA_P_FoxN23	
132	GENE_P_FoxO-_transcription_-0	GENE_P_FoxO_transcription	GENE_P_FoxO $\xrightarrow{\text{PROTEIN\_P\_Ets1, PROTEIN\_P\_Hex, PROTEIN\_P\_Tgif, PROTEIN\_P\_F}} \text{mRNA\_P\_FoxO}$	
133	GENE_P_FvMo-_transcription_-0	GENE_P_FvMo_transcription	GENE_P_FvMo $\xrightarrow{\text{PROTEIN\_P\_Gcm, PROTEIN\_P\_GataE}} \text{mRNA\_P\_FvMo}$	
134	GENE_P_GataC-_transcription_-0	GENE_P_GataC_transcription	GENE_P_GataC $\xrightarrow{\text{PROTEIN\_P\_GataE, PROTEIN\_P\_Hnf6, PROTEIN\_GCM, PROTEIN\_P\_GataC}} \text{mRNA\_P\_GataC}$	
135	GENE_P_GataE-_transcription_-0	GENE_P_GataE_transcription	GENE_P_GataE $\xrightarrow{\text{PROTEIN\_P\_Otx, PROTEIN\_P\_SuHN, PROTEIN\_P\_Hox}} \text{mRNA\_P\_GataE}$	
136	GENE_P_Gcad-_transcription_-0	GENE_P_Gcad_transcription	GENE_P_Gcad $\xrightarrow{\text{PROTEIN\_P\_UbiqGcad, PROTEIN\_P\_Snail}} \text{mRNA\_P\_Gcad}$	
137	GENE_P_Gcm-_transcription_-0	GENE_P_Gcm_transcription	GENE_P_Gcm $\xrightarrow{\text{PROTEIN\_P\_nBCF, PROTEIN\_P\_SuHN, PROTEIN\_P\_Gcm, PROTEIN\_P\_GataE}} \text{mRNA\_P\_Gcm}$	
138	GENE_P-_Gelsolin-_transcription_-0	GENE_P_Gelsolin_transcription	GENE_P_Gelsolin $\xrightarrow{\text{PROTEIN\_P\_Bra}} \text{mRNA\_P\_Gelsolin}$	

Nº	Id	Name	Reaction Equation	SBO
139	GENE_P_HesC-_transcription_0	GENE_P_HesC_transcription	GENE_P_HesC $\xrightarrow{\text{PROTEIN\_P\_UbiqHesC, PROTEIN\_P\_Pmar1}}$	mRNA_P_HesC
140	GENE_P_Hex-_transcription_0	GENE_P_Hex_transcription	GENE_P_Hex $\xrightarrow{\text{PROTEIN\_P\_Tgif, PROTEIN\_P\_Ets1, PROTEIN\_P\_Erg}}$	mRNA_P_Hex
141	GENE_P_Hnf6-_transcription_0	GENE_P_Hnf6_transcription	GENE_P_Hnf6 $\xrightarrow{\text{PROTEIN\_P\_UbiqHnf6}}$	mRNA_P_Hnf6
142	GENE_P_Hox-_transcription_0	GENE_P_Hox_transcription	GENE_P_Hox $\xrightarrow{\text{PROTEIN\_P\_Blimp1, PROTEIN\_P\_nBTCF, PROTEIN\_P\_Eve, PROTEIN\_P\_GataE}}$	
143	GENE_P_Kakapo-_transcription_0	GENE_P_Kakapo_transcription	GENE_P_Kakapo $\xrightarrow{\text{PROTEIN\_P\_Bra}}$	mRNA_P_Kakapo
144	GENE_P_Lim-_transcription_0	GENE_P_Lim_transcription	GENE_P_Lim $\xrightarrow{\text{PROTEIN\_P\_GataE, PROTEIN\_P\_Otx}}$	mRNA_P_Lim
145	GENE_P_Msp130-_transcription_0	GENE_P_Msp130_transcription	GENE_P_Msp130 $\xrightarrow{\text{PROTEIN\_P\_Hnf6, PROTEIN\_P\_FoxB, PROTEIN\_P\_Ets1, PROTEIN\_P\_Alx1, PROTEIN\_P\_VEGFSignal}}$	
146	GENE_P_MspL-_transcription_0	GENE_P_MspL_transcription	GENE_P_MspL $\xrightarrow{\text{PROTEIN\_P\_Ets1, PROTEIN\_P\_Alx1, PROTEIN\_P\_VEGFSignal, PROTEIN\_P\_GataE}}$	

Nº	Id	Name	Reaction Equation	SBO
147	GENE_P_Not-_transcription_0	GENE_P_Not_transcription	GENE_P_Not $\xrightarrow{\text{PROTEIN\_P\_GataE}}$ mRNA_P_Not	
148	GENE_P_Nrl-_transcription_0	GENE_P_Nrl_transcription	GENE_P_Nrl $\xrightarrow{\text{PROTEIN\_P\_TBr, PROTEIN\_P\_UMANrl, PROTEIN\_P\_FoxN23, PROT}}$	
149	GENE_P_OrCt-_transcription_0	GENE_P_OrCt_transcription	GENE_P_OrCt $\xrightarrow{\text{PROTEIN\_P\_Bra, PROTEIN\_P\_Hox}}$ mRNA_P_OrCt	
150	GENE_P_Otx-_transcription_0	GENE_P_Otx_transcription	GENE_P_Otx $\xrightarrow{\text{PROTEIN\_P\_UVAOtx, PROTEIN\_P\_Blimp1, PROTEIN\_P\_GataE, PRO}}$	
151	GENE_P_Pks-_transcription_0	GENE_P_Pks_transcription	GENE_P_Pks $\xrightarrow{\text{PROTEIN\_P\_Gcm, PROTEIN\_P\_GataE}}$ mRNA_P_Pks	
152	GENE_P_Pmar1-_transcription_0	GENE_P_Pmar1_transcription	GENE_P_Pmar1 $\xrightarrow{\text{PROTEIN\_P\_nBTCF, PROTEIN\_P\_Otx, PROTEIN\_P\_GroTCF}}$ mRNA_P_Pmar1	
153	GENE_P_Sm27-_transcription_0	GENE_P_Sm27_transcription	GENE_P_Sm27 $\xrightarrow{\text{PROTEIN\_P\_Dri, PROTEIN\_P\_Hnf6, PROTEIN\_P\_Ets1, PROTEIN\_P}}$	
154	GENE_P_Sm30-_transcription_0	GENE_P_Sm30_transcription	GENE_P_Sm30 $\xrightarrow{\text{PROTEIN\_P\_VEGFSignal}}$ mRNA_P_Sm30	

Nº	Id	Name	Reaction Equation	SBO
155	GENE_P_Sm50-_transcription_0	GENE_P_Sm50_transcription	GENE_P_Sm50 $\xrightarrow{\text{PROTEIN\_P\_Dri, PROTEIN\_P\_Hnf6, PROTEIN\_P\_Ets1, PROTEIN\_P\_L}}$	
156	GENE_P_Snail-_transcription_0	GENE_P_Snail_transcription	GENE_P_Snail $\xrightarrow{\text{PROTEIN\_P\_Hex}}$ mRNA_P_Snail	
157	GENE_P_SoxB1-_transcription_0	GENE_P_SoxB1_transcription	GENE_P_SoxB1 $\xrightarrow{\text{PROTEIN\_P\_UbiqSoxB1, PROTEIN\_P\_SoxB1}}$ mRNA_P_SoxB1	
158	GENE_P_SoxC-_transcription_0	GENE_P_SoxC_transcription	GENE_P_SoxC $\xrightarrow{\text{PROTEIN\_P\_UbiqSoxC, PROTEIN\_P\_HesC, PROTEIN\_P\_SoxC}}$ mRNA_P_SoxC	
159	GENE_P_SuTx-_transcription_0	GENE_P_SuTx_transcription	GENE_P_SuTx $\xrightarrow{\text{PROTEIN\_P\_Gcm, PROTEIN\_P\_GataE}}$ mRNA_P_SuTx	
160	GENE_P_TBr-_transcription_0	GENE_P_TBr_transcription	GENE_P_TBr $\xrightarrow{\text{PROTEIN\_P\_Ets1, PROTEIN\_P\_HesC, PROTEIN\_P\_TBr}}$ mRNA_P_TBr	
161	GENE_P_Tel-_transcription_0	GENE_P_Tel_transcription	GENE_P_Tel $\xrightarrow{\text{PROTEIN\_P\_UbiqTel, PROTEIN\_P\_Tel, PROTEIN\_P\_HesC}}$ mRNA_P_Tel	
162	GENE_P_Tgif-_transcription_0	GENE_P_Tgif_transcription	GENE_P_Tgif $\xrightarrow{\text{PROTEIN\_P\_Tgif, PROTEIN\_P\_Ets1, PROTEIN\_P\_Erg, PROTEIN\_P\_I}}$	

Nº	Id	Name	Reaction Equation	SBO
163	GENE_P_VEGFR-_transcription_0	GENE_P_VEGFR_transcription	GENE_P_VEGFR → PROTEIN_P_Alx1, PROTEIN_P_Dri, PROTEIN_P_Ets1, PROTEIN_P_FoxD1, PROTEIN_P_Hnf6, PROTEIN_P_JunB, PROTEIN_P_Klf4, PROTEIN_P_Nanog, PROTEIN_P_Oct4, PROTEIN_P_Smads, PROTEIN_P_Tcf21, PROTEIN_P_Tcf3, PROTEIN_P_Tcf7, PROTEIN_P_Tcf7L2, PROTEIN_P_Tcf8, PROTEIN_P_Tcf9, PROTEIN_P_Tcfy, PROTEIN_P_Vimentin, mRNA_P_VEGFR	
164	GENE_P_Wnt8-_transcription_0	GENE_P_Wnt8_transcription	GENE_P_Wnt8 → PROTEIN_P_nBTCF, PROTEIN_P_Blimp1, PROTEIN_P_GroTCF, PROTEIN_P_Tcfy, mRNA_P_Wnt8	
165	GENE_P_z13-_transcription_0	GENE_P_z13_transcription	GENE_P_z13 → PROTEIN_P_nBTCF, PROTEIN_P_GroTCF, PROTEIN_P_Hnf6, mRNA_P_z13	
166	M_Gcad_Hill-_Kinetic_0	M_Gcad_Hill_Kinetic	PRE_M_Gcad → mRNA_M_Gcad	
167	M_Notch_Hill-_Kinetic_0	M_Notch_Hill_Kinetic	PRE_M_Notch → mRNA_M_Notch	
168	M_Otx_Hill-_Kinetic_0	M_Otx_Hill_Kinetic	PRE_M_Otx → mRNA_M_Otx	
169	M_SoxB1_Hill-_Kinetic_0	M_SoxB1_Hill_Kinetic	PRE_M_SoxB1 → mRNA_M_SoxB1	
170	M_SuH_Hill-_Kinetic_0	M_SuH_Hill_Kinetic	PRE_M_SuH → mRNA_M_SuH	
171	M_UMADelta-_Hill_Kinetic_0	M_UMADelta_Hill_Kinetic	PRE_M_UMADelta → mRNA_M_UMADelta	
172	M_UMANrl_Hill-_Kinetic_0	M_UMANrl_Hill_Kinetic	PRE_M_UMANrl → mRNA_M_UMANrl	
173	M_UMR_Hill-_Kinetic_0	M_UMR_Hill_Kinetic	PRE_M_UMR → mRNA_M_UMR	
174	M_UbiqSoxB1-_Hill_Kinetic_0	M_UbiqSoxB1_Hill_Kinetic	PRE_M_UbiqSoxB1 → mRNA_M_UbiqSoxB1	

Nº	Id	Name	Reaction Equation	SBO
175	M_cB_Hill-Kinetic_0	M_cB_Hill_Kinetic	PRE_M_cB → mRNA_M_cB	
176	PROTEIN_E_Alx1-degradation_0	PROTEIN_E_Alx1_degradation	PROTEIN_E_Alx1 $\xrightarrow{\text{none}}$ none	
177	PROTEIN-E_Apobec-degradation_0	PROTEIN_E_Apobec_degradation	PROTEIN_E_Apobec $\xrightarrow{\text{none}}$ none	
178	PROTEIN-E_Blimp1-degradation_0	PROTEIN_E_Blimp1_degradation	PROTEIN_E_Blimp1 $\xrightarrow{\text{none}}$ none	
179	PROTEIN_E_Bra-degradation_0	PROTEIN_E_Bra_degradation	PROTEIN_E_Bra $\xrightarrow{\text{none}}$ none	
180	PROTEIN_E_Brn-degradation_0	PROTEIN_E_Brn_degradation	PROTEIN_E_Brn $\xrightarrow{\text{none}}$ none	
181	PROTEIN_E_CAPK-degradation_0	PROTEIN_E_CAPK_degradation	PROTEIN_E_CAPK $\xrightarrow{\text{none}}$ none	
182	PROTEIN_E_CyP-degradation_0	PROTEIN_E_CyP_degradation	PROTEIN_E_CyP $\xrightarrow{\text{none}}$ none	
183	PROTEIN-E_Delta-activation_0	PROTEIN_E_Delta_activation	PROTEIN_E_Delta2 $\xrightarrow{\text{PROTEIN_E_Nrl}}$ PROTEIN_E_Delta	
184	PROTEIN-E_Delta-degradation_0	PROTEIN_E_Delta_degradation	PROTEIN_E_Delta $\xrightarrow{\text{none}}$ none	
185	PROTEIN-E_Delta-inactivation_0	PROTEIN_E_Delta_inactivation	PROTEIN_E_Delta → PROTEIN_E_Delta2	

Nº	Id	Name	Reaction Equation	SBO
186	PROTEIN_E_Dpt-degradation_0	PROTEIN_E_Dpt_degradation	PROTEIN_E_Dpt $\xrightarrow{\text{none}}$ none	
187	PROTEIN_E_Dri-degradation_0	PROTEIN_E_Dri_degradation	PROTEIN_E_Dri $\xrightarrow{\text{none}}$ none	
188	PROTEIN_E_ES-degradation_0	PROTEIN_E_ES_degradation	PROTEIN_E_ES $\xrightarrow{\text{none}}$ none	
189	PROTEIN_E_Endo16-degradation_0	PROTEIN_E_Endo16_degradation	PROTEIN_E_Endo16 $\xrightarrow{\text{none}}$ none	
190	PROTEIN_E_Erg-degradation_0	PROTEIN_E_Erg_degradation	PROTEIN_E_Erg $\xrightarrow{\text{none}}$ none	
191	PROTEIN_E_Ets1-degradation_0	PROTEIN_E_Ets1_degradation	PROTEIN_E_Ets1 $\xrightarrow{\text{none}}$ none	
192	PROTEIN_E_Eve-degradation_0	PROTEIN_E_Eve_degradation	PROTEIN_E_Eve $\xrightarrow{\text{none}}$ none	
193	PROTEIN_E_Ficolin-degradation_0	PROTEIN_E_Ficolin_degradation	PROTEIN_E_Ficolin $\xrightarrow{\text{none}}$ none	
194	PROTEIN_E_FoxA-degradation_0	PROTEIN_E_FoxA_degradation	PROTEIN_E_FoxA $\xrightarrow{\text{none}}$ none	
195	PROTEIN_E_FoxB-degradation_0	PROTEIN_E_FoxB_degradation	PROTEIN_E_FoxB $\xrightarrow{\text{none}}$ none	
196	PROTEIN_E_FoxN23-degradation_0	PROTEIN_E_FoxN23_degradation	PROTEIN_E_FoxN23 $\xrightarrow{\text{none}}$ none	
197	PROTEIN_E_FoxO-degradation_0	PROTEIN_E_FoxO_degradation	PROTEIN_E_FoxO $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
198	PROTEIN_E_FvMo-degradation_0	PROTEIN_E_FvMo_degradation	PROTEIN_E_FvMo $\xrightarrow{\text{none}}$ none	
199	PROTEIN_E_GSK3_i_activation_0	PROTEIN_E_GSK3_i_activation	PROTEIN_E_GSK3_a $\xrightarrow{\text{PROTEIN\_E\_frizzled\_a}}$ PROTEIN_E_GSK3_i	
200	PROTEIN_E_GSK3_i_inactivation_0	PROTEIN_E_GSK3_i_inactivation	PROTEIN_E_GSK3_i $\longrightarrow$ PROTEIN_E_GSK3_a	
201	PROTEIN_E_GataC_degradation_0	PROTEIN_E_GataC_degradation	PROTEIN_E_GataC $\xrightarrow{\text{none}}$ none	
202	PROTEIN_E_GataE_degradation_0	PROTEIN_E_GataE_degradation	PROTEIN_E_GataE $\xrightarrow{\text{none}}$ none	
203	PROTEIN_E_Gcad_degradation_0	PROTEIN_E_Gcad_degradation	PROTEIN_E_Gcad $\xrightarrow{\text{none}}$ none	
204	PROTEIN_E_Gcm_degradation_0	PROTEIN_E_Gcm_degradation	PROTEIN_E_Gcm $\xrightarrow{\text{none}}$ none	
205	PROTEIN_E_Gelsolin_degradation_0	PROTEIN_E_Gelsolin_degradation	PROTEIN_E_Gelsolin $\xrightarrow{\text{none}}$ none	
206	PROTEIN_E_GroTCF_accociation_0	PROTEIN_E_GroTCF_accociation	PROTEIN_E_Gro PROTEIN_E_TCF $\longrightarrow$ PROTEIN_E_GroTCF	+
207	PROTEIN_E_GroTCF_dissociation_0	PROTEIN_E_GroTCF_dissociation	PROTEIN_E_GroTCF $\longrightarrow$ PROTEIN_E_Gro PROTEIN_E_TCF	+

Nº	Id	Name	Reaction Equation	SBO
208	PROTEIN_E_HesC-degradation_0	PROTEIN_E_HesC_degradation	PROTEIN_E_HesC $\xrightarrow{\text{none}}$ none	
209	PROTEIN_E_Hex-degradation_0	PROTEIN_E_Hex_degradation	PROTEIN_E_Hex $\xrightarrow{\text{none}}$ none	
210	PROTEIN_E_Hnf6-degradation_0	PROTEIN_E_Hnf6_degradation	PROTEIN_E_Hnf6 $\xrightarrow{\text{none}}$ none	
211	PROTEIN_E_Hox-degradation_0	PROTEIN_E_Hox_degradation	PROTEIN_E_Hox $\xrightarrow{\text{none}}$ none	
212	PROTEIN_E_Kakapo-degradation_0	PROTEIN_E_Kakapo_degradation	PROTEIN_E_Kakapo $\xrightarrow{\text{none}}$ none	
213	PROTEIN_E_Lim-degradation_0	PROTEIN_E_Lim_degradation	PROTEIN_E_Lim $\xrightarrow{\text{none}}$ none	
214	PROTEIN_E_Msp130-degradation_0	PROTEIN_E_Msp130_degradation	PROTEIN_E_Msp130 $\xrightarrow{\text{none}}$ none	
215	PROTEIN_E_MspL-degradation_0	PROTEIN_E_MspL_degradation	PROTEIN_E_MspL $\xrightarrow{\text{none}}$ none	
216	PROTEIN_E_Not-degradation_0	PROTEIN_E_Not_degradation	PROTEIN_E_Not $\xrightarrow{\text{none}}$ none	
217	PROTEIN_E_Notch-activation_0	PROTEIN_E_Notch_activation	PROTEIN_E_Notch2 $\xrightarrow{\text{PROTEIN_E_Delta2}}$ PROTEIN_E_Notch	
218	PROTEIN_E_Notch-degradation_0	PROTEIN_E_Notch_degradation	PROTEIN_E_Notch $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
219	PROTEIN_E_Notch-_inactivation_0	PROTEIN_E_Notch_inactivation	$\text{PROTEIN\_E\_Notch} \longrightarrow \text{PROTEIN\_E\_Notch2}$	
220	PROTEIN_E_Nrl-_degradation_0	PROTEIN_E_Nrl_degradation	$\text{PROTEIN\_E\_Nrl} \xrightarrow{\text{none}} \text{none}$	
221	PROTEIN_E_OrCt-_degradation_0	PROTEIN_E_OrCt_degradation	$\text{PROTEIN\_E\_OrCt} \xrightarrow{\text{none}} \text{none}$	
222	PROTEIN_E_Otx-_degradation_0	PROTEIN_E_Otx_degradation	$\text{PROTEIN\_E\_Otx} \xrightarrow{\text{none}} \text{none}$	
223	PROTEIN_E_Pks-_degradation_0	PROTEIN_E_Pks_degradation	$\text{PROTEIN\_E\_Pks} \xrightarrow{\text{none}} \text{none}$	
224	PROTEIN_E_Pmar1-_degradation_0	PROTEIN_E_Pmar1_degradation	$\text{PROTEIN\_E\_Pmar1} \xrightarrow{\text{none}} \text{none}$	
225	PROTEIN_E_Sm27-_degradation_0	PROTEIN_E_Sm27_degradation	$\text{PROTEIN\_E\_Sm27} \xrightarrow{\text{none}} \text{none}$	
226	PROTEIN_E_Sm30-_degradation_0	PROTEIN_E_Sm30_degradation	$\text{PROTEIN\_E\_Sm30} \xrightarrow{\text{none}} \text{none}$	
227	PROTEIN_E_Sm50-_degradation_0	PROTEIN_E_Sm50_degradation	$\text{PROTEIN\_E\_Sm50} \xrightarrow{\text{none}} \text{none}$	
228	PROTEIN_E_Snail-_degradation_0	PROTEIN_E_Snail_degradation	$\text{PROTEIN\_E\_Snail} \xrightarrow{\text{none}} \text{none}$	
229	PROTEIN_E_SoxB1-_degradation_0	PROTEIN_E_SoxB1_degradation	$\text{PROTEIN\_E\_SoxB1} \xrightarrow{\text{none}} \text{none}$	

Nº	Id	Name	Reaction Equation	SBO
230	PROTEIN_E_SoxC-degradation_0	PROTEIN_E_SoxC_degradation	$\text{PROTEIN\_E\_SoxC} \xrightarrow{\text{none}} \text{none}$	
231	PROTEIN_E_SuHN-accociation_0	PROTEIN_E_SuHN_accociation	$\text{PROTEIN\_E\_Notch2} + \text{PROTEIN\_E\_SuH} \longrightarrow \text{PROTEIN\_E\_SuHN}$	+
232	PROTEIN_E_SuHN-dissociation_0	PROTEIN_E_SuHN_dissociation	$\text{PROTEIN\_E\_SuHN} \longrightarrow \text{PROTEIN\_E\_Notch2} + \text{PROTEIN\_E\_SuH}$	+
233	PROTEIN_E_SuH-degradation_0	PROTEIN_E_SuH_degradation	$\text{PROTEIN\_E\_SuH} \xrightarrow{\text{none}} \text{none}$	
234	PROTEIN_E_SuTx-degradation_0	PROTEIN_E_SuTx_degradation	$\text{PROTEIN\_E\_SuTx} \xrightarrow{\text{none}} \text{none}$	
235	PROTEIN_E_TBr-degradation_0	PROTEIN_E_TBr_degradation	$\text{PROTEIN\_E\_TBr} \xrightarrow{\text{none}} \text{none}$	
236	PROTEIN_E_Tel-degradation_0	PROTEIN_E_Tel_degradation	$\text{PROTEIN\_E\_Tel} \xrightarrow{\text{none}} \text{none}$	
237	PROTEIN_E_Tgif-degradation_0	PROTEIN_E_Tgif_degradation	$\text{PROTEIN\_E\_Tgif} \xrightarrow{\text{none}} \text{none}$	
238	PROTEIN_E_UMR-degradation_0	PROTEIN_E_UMR_degradation	$\text{PROTEIN\_E\_UMR} \xrightarrow{\text{none}} \text{none}$	
239	PROTEIN_E_UVA0tx-degradation_0	PROTEIN_E_UVA0tx_degradation	$\text{PROTEIN\_E\_UVA0tx} \xrightarrow{\text{none}} \text{none}$	
240	PROTEIN_E_UbiqSoxB1-degradation_0	PROTEIN_E_UbiqSoxB1_degradation	$\text{PROTEIN\_E\_UbiqSoxB1} \xrightarrow{\text{none}} \text{none}$	
241	PROTEIN_E_VEGFR-degradation_0	PROTEIN_E_VEGFR_degradation	$\text{PROTEIN\_E\_VEGFR} \xrightarrow{\text{none}} \text{none}$	

Nº	Id	Name	Reaction Equation	SBO
242	PROTEIN_E_-_VEGFSignal_-_accociation_0	PROTEIN_E_VEGFSignal_accociation	PROTEIN_E_L1 + PROTEIN_E_VEGFR + PROTEIN_E_VEGF → PROTEIN_E_VEGFSignal	
243	PROTEIN_E_-_VEGFSignal_-_dissociation_0	PROTEIN_E_VEGFSignal_dissociation	PROTEIN_E_VEGFSignal → PROTEIN_E_L1 + PROTEIN_E_VEGFR + PROTEIN_E_VEGF	
244	PROTEIN_E_VEGF_-_degradation_0	PROTEIN_E_VEGF_degradation	PROTEIN_E_VEGF $\xrightarrow{\text{none}}$ none	
245	PROTEIN_E_Wnt8_-_degradation_0	PROTEIN_E_Wnt8_degradation	PROTEIN_E_Wnt8 $\xrightarrow{\text{none}}$ none	
246	PROTEIN_E_cB_a_-_degradation_0	PROTEIN_E_cB_a_degradation	PROTEIN_E_cB $\xrightarrow{\text{PROTEIN\_E\_GSK3\_a}}$ $\emptyset$	
247	PROTEIN_E_cB_-_degradation_0	PROTEIN_E_cB_degradation	PROTEIN_E_cB $\xrightarrow{\text{none}}$ none	
248	PROTEIN_E_-_frizzled_a_-_activation_0	PROTEIN_E_frizzled_a_activation	PROTEIN_E_frizzled_i $\xrightarrow{\text{PROTEIN\_E\_Wnt8}}$ PROTEIN_E_frizzled_a	
249	PROTEIN_E_-_frizzled_a_-_inactivation_0	PROTEIN_E_frizzled_a_inactivation	PROTEIN_E_frizzled_a → PROTEIN_E_frizzled_i	
250	PROTEIN_E_nBTcf_-_accociation_0	PROTEIN_E_nBTcf_accociation	PROTEIN_E_cB + PROTEIN_E_TCF → PROTEIN_E_nBTcf	
251	PROTEIN_E_nBTcf_-_dissociation_0	PROTEIN_E_nBTcf_dissociation	PROTEIN_E_nBTcf → PROTEIN_E_cB + PROTEIN_E_TCF	

Nº	Id	Name	Reaction Equation	SBO
252	PROTEIN_E_z13-_degradation_0	PROTEIN_E_z13_degradation	PROTEIN_E_z13 $\xrightarrow{\text{none}}$ none	
253	PROTEIN_M_Alx1-_degradation_0	PROTEIN_M_Alx1_degradation	PROTEIN_M_Alx1 $\xrightarrow{\text{none}}$ none	
254	PROTEIN-_M_Apobec-_degradation_0	PROTEIN_M_Apobec_degradation	PROTEIN_M_Apobec $\xrightarrow{\text{none}}$ none	
255	PROTEIN-_M_Blimp1-_degradation_0	PROTEIN_M_Blimp1_degradation	PROTEIN_M_Blimp1 $\xrightarrow{\text{none}}$ none	
256	PROTEIN_M_Bra-_degradation_0	PROTEIN_M_Bra_degradation	PROTEIN_M_Bra $\xrightarrow{\text{none}}$ none	
257	PROTEIN_M_Brn-_degradation_0	PROTEIN_M_Brn_degradation	PROTEIN_M_Brn $\xrightarrow{\text{none}}$ none	
258	PROTEIN_M_CAPK-_degradation_0	PROTEIN_M_CAPK_degradation	PROTEIN_M_CAPK $\xrightarrow{\text{none}}$ none	
259	PROTEIN_M_CyP-_degradation_0	PROTEIN_M_CyP_degradation	PROTEIN_M_CyP $\xrightarrow{\text{none}}$ none	
260	PROTEIN-_M_Delta-_activation_0	PROTEIN_M_Delta_activation	PROTEIN_M_Delta2 $\xrightarrow{\text{PROTEIN_M_Nrl}}$ PROTEIN_M_Delta	
261	PROTEIN-_M_Delta-_degradation_0	PROTEIN_M_Delta_degradation	PROTEIN_M_Delta $\xrightarrow{\text{none}}$ none	
262	PROTEIN-_M_Delta-_inactivation_0	PROTEIN_M_Delta_inactivation	PROTEIN_M_Delta $\longrightarrow$ PROTEIN_M_Delta2	

Nº	Id	Name	Reaction Equation	SBO
263	PROTEIN_M_Dpt-_degradation_0	PROTEIN_M_Dpt_degradation	PROTEIN_M_Dpt $\xrightarrow{\text{none}}$ none	
264	PROTEIN_M_Dri-_degradation_0	PROTEIN_M_Dri_degradation	PROTEIN_M_Dri $\xrightarrow{\text{none}}$ none	
265	PROTEIN-_M_Endo16-_degradation_0	PROTEIN_M_Endo16_degradation	PROTEIN_M_Endo16 $\xrightarrow{\text{none}}$ none	
266	PROTEIN_M_Erg-_degradation_0	PROTEIN_M_Erg_degradation	PROTEIN_M_Erg $\xrightarrow{\text{none}}$ none	
267	PROTEIN_M_Ets1-_degradation_0	PROTEIN_M_Ets1_degradation	PROTEIN_M_Ets1 $\xrightarrow{\text{none}}$ none	
268	PROTEIN_M_Eve-_degradation_0	PROTEIN_M_Eve_degradation	PROTEIN_M_Eve $\xrightarrow{\text{none}}$ none	
269	PROTEIN_M-_Ficolin-_degradation_0	PROTEIN_M_Ficolin_degradation	PROTEIN_M_Ficolin $\xrightarrow{\text{none}}$ none	
270	PROTEIN_M_FoxA-_degradation_0	PROTEIN_M_FoxA_degradation	PROTEIN_M_FoxA $\xrightarrow{\text{none}}$ none	
271	PROTEIN_M_FoxB-_degradation_0	PROTEIN_M_FoxB_degradation	PROTEIN_M_FoxB $\xrightarrow{\text{none}}$ none	
272	PROTEIN-_M_FoxN23-_degradation_0	PROTEIN_M_FoxN23_degradation	PROTEIN_M_FoxN23 $\xrightarrow{\text{none}}$ none	
273	PROTEIN_M_FoxO-_degradation_0	PROTEIN_M_FoxO_degradation	PROTEIN_M_FoxO $\xrightarrow{\text{none}}$ none	
274	PROTEIN_M_FvMo-_degradation_0	PROTEIN_M_FvMo_degradation	PROTEIN_M_FvMo $\xrightarrow{\text{none}}$ none	

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275	PROTEIN_M_GSK3_i_activation_0	PROTEIN_M_GSK3_i_activation	PROTEIN_M_GSK3_a $\xrightarrow{\text{PROTEIN\_M\_frizzled\_a}}$ PROTEIN_M_GSK3_i	
276	PROTEIN_M_GSK3_i_inactivation_0	PROTEIN_M_GSK3_i_inactivation	PROTEIN_M_GSK3_i $\longrightarrow$ PROTEIN_M_GSK3_a	
277	PROTEIN_M_GataC_degradation_0	PROTEIN_M_GataC_degradation	PROTEIN_M_GataC $\xrightarrow{\text{none}}$ none	
278	PROTEIN_M_GataE_degradation_0	PROTEIN_M_GataE_degradation	PROTEIN_M_GataE $\xrightarrow{\text{none}}$ none	
279	PROTEIN_M_Gcad_degradation_0	PROTEIN_M_Gcad_degradation	PROTEIN_M_Gcad $\xrightarrow{\text{none}}$ none	
280	PROTEIN_M_Gcm_degradation_0	PROTEIN_M_Gcm_degradation	PROTEIN_M_Gcm $\xrightarrow{\text{none}}$ none	
281	PROTEIN_M_Gelsolin_degradation_0	PROTEIN_M_Gelsolin_degradation	PROTEIN_M_Gelsolin $\xrightarrow{\text{none}}$ none	
282	PROTEIN_M_GroTCF_accociation_0	PROTEIN_M_GroTCF_accociation	PROTEIN_M_Gro PROTEIN_M_TCF $\longrightarrow$ PROTEIN_M_GroTCF	+
283	PROTEIN_M_GroTCF_dissociation_0	PROTEIN_M_GroTCF_dissociation	PROTEIN_M_GroTCF $\longrightarrow$ PROTEIN_M_Gro PROTEIN_M_TCF	+
284	PROTEIN_M_HesC_degradation_0	PROTEIN_M_HesC_degradation	PROTEIN_M_HesC $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
285	PROTEIN_M_Hex-degradation_0	PROTEIN_M_Hex_degradation	PROTEIN_M_Hex $\xrightarrow{\text{none}}$ none	
286	PROTEIN_M_Hnf6-degradation_0	PROTEIN_M_Hnf6_degradation	PROTEIN_M_Hnf6 $\xrightarrow{\text{none}}$ none	
287	PROTEIN_M_Hox-degradation_0	PROTEIN_M_Hox_degradation	PROTEIN_M_Hox $\xrightarrow{\text{none}}$ none	
288	PROTEIN_M_Kakapo-degradation_0	PROTEIN_M_Kakapo_degradation	PROTEIN_M_Kakapo $\xrightarrow{\text{none}}$ none	
289	PROTEIN_M_Lim-degradation_0	PROTEIN_M_Lim_degradation	PROTEIN_M_Lim $\xrightarrow{\text{none}}$ none	
290	PROTEIN_M_Msp130-degradation_0	PROTEIN_M_Msp130_degradation	PROTEIN_M_Msp130 $\xrightarrow{\text{none}}$ none	
291	PROTEIN_M_MspL-degradation_0	PROTEIN_M_MspL_degradation	PROTEIN_M_MspL $\xrightarrow{\text{none}}$ none	
292	PROTEIN_M_Not-degradation_0	PROTEIN_M_Not_degradation	PROTEIN_M_Not $\xrightarrow{\text{none}}$ none	
293	PROTEIN_M_Notch-activation_0	PROTEIN_M_Notch_activation	PROTEIN_M_Notch2 $\xrightarrow{\text{PROTEIN\_M\_Delta2}}$ PROTEIN_M_Notch	
294	PROTEIN_M_Notch-degradation_0	PROTEIN_M_Notch_degradation	PROTEIN_M_Notch $\xrightarrow{\text{none}}$ none	
295	PROTEIN_M_Notch-inactivation_0	PROTEIN_M_Notch_inactivation	PROTEIN_M_Notch $\longrightarrow$ PROTEIN_M_Notch2	

Nº	Id	Name	Reaction Equation	SBO
296	PROTEIN_M_Nrl-degradation_0	PROTEIN_M_Nrl_degradation	PROTEIN_M_Nrl $\xrightarrow{\text{none}}$ none	
297	PROTEIN_M_OrCt-degradation_0	PROTEIN_M_OrCt_degradation	PROTEIN_M_OrCt $\xrightarrow{\text{none}}$ none	
298	PROTEIN_M_Otx-degradation_0	PROTEIN_M_Otx_degradation	PROTEIN_M_Otx $\xrightarrow{\text{none}}$ none	
299	PROTEIN_M_Pks-degradation_0	PROTEIN_M_Pks_degradation	PROTEIN_M_Pks $\xrightarrow{\text{none}}$ none	
300	PROTEIN_M_Pmar1-degradation_0	PROTEIN_M_Pmar1_degradation	PROTEIN_M_Pmar1 $\xrightarrow{\text{none}}$ none	
301	PROTEIN_M_Sm27-degradation_0	PROTEIN_M_Sm27_degradation	PROTEIN_M_Sm27 $\xrightarrow{\text{none}}$ none	
302	PROTEIN_M_Sm30-degradation_0	PROTEIN_M_Sm30_degradation	PROTEIN_M_Sm30 $\xrightarrow{\text{none}}$ none	
303	PROTEIN_M_Sm50-degradation_0	PROTEIN_M_Sm50_degradation	PROTEIN_M_Sm50 $\xrightarrow{\text{none}}$ none	
304	PROTEIN_M_Snail-degradation_0	PROTEIN_M_Snail_degradation	PROTEIN_M_Snail $\xrightarrow{\text{none}}$ none	
305	PROTEIN_M_SoxB1-degradation_0	PROTEIN_M_SoxB1_degradation	PROTEIN_M_SoxB1 $\xrightarrow{\text{none}}$ none	
306	PROTEIN_M_SoxC-degradation_0	PROTEIN_M_SoxC_degradation	PROTEIN_M_SoxC $\xrightarrow{\text{none}}$ none	
307	PROTEIN_M_SuHN-accociation_0	PROTEIN_M_SuHN_accociation	PROTEIN_M_Notch2 PROTEIN_M_SuH $\longrightarrow$ PROTEIN_M_SuHN	+

Nº	Id	Name	Reaction Equation	SBO
308	PROTEIN_M_SuHN-_dissociation_0	PROTEIN_M_SuHN_dissociation	PROTEIN_M_SuHN → PROTEIN_M_Notch2 + PROTEIN_M_SuH	
309	PROTEIN_M_SuH-_degradation_0	PROTEIN_M_SuH_degradation	PROTEIN_M_SuH $\xrightarrow{\text{none}}$ none	
310	PROTEIN_M_SuTx-_degradation_0	PROTEIN_M_SuTx_degradation	PROTEIN_M_SuTx $\xrightarrow{\text{none}}$ none	
311	PROTEIN_M_TBr-_degradation_0	PROTEIN_M_TBr_degradation	PROTEIN_M_TBr $\xrightarrow{\text{none}}$ none	
312	PROTEIN_M_Tel-_degradation_0	PROTEIN_M_Tel_degradation	PROTEIN_M_Tel $\xrightarrow{\text{none}}$ none	
313	PROTEIN_M_Tgif-_degradation_0	PROTEIN_M_Tgif_degradation	PROTEIN_M_Tgif $\xrightarrow{\text{none}}$ none	
314	PROTEIN_M-_UMADelta-_degradation_0	PROTEIN_M_UMADelta_degradation	PROTEIN_M_UMADelta $\xrightarrow{\text{none}}$ none	
315	PROTEIN-_M_UMANrl-_degradation_0	PROTEIN_M_UMANrl_degradation	PROTEIN_M_UMANrl $\xrightarrow{\text{none}}$ none	
316	PROTEIN_M_UMR-_degradation_0	PROTEIN_M_UMR_degradation	PROTEIN_M_UMR $\xrightarrow{\text{none}}$ none	
317	PROTEIN_M-_UbiqSoxB1-_degradation_0	PROTEIN_M_UbiqSoxB1_degradation	PROTEIN_M_UbiqSoxB1 $\xrightarrow{\text{none}}$ none	
318	PROTEIN-_M_VEGFR-_degradation_0	PROTEIN_M_VEGFR_degradation	PROTEIN_M_VEGFR $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
319	PROTEIN_M_-_VEGFSignal_-_accociation_0	PROTEIN_M_VEGFSignal_accociation	$\text{PROTEIN\_M\_L1} + \text{PROTEIN\_M\_VEGFR} + \text{PROTEIN\_E\_VEGF} \rightarrow \text{PROTEIN\_M\_VEGFSignal}$	
320	PROTEIN_M_-_VEGFSignal_-_dissociation_0	PROTEIN_M_VEGFSignal_dissociation	$\text{PROTEIN\_M\_VEGFSignal} \rightarrow \text{PROTEIN\_M\_L1} + \text{PROTEIN\_M\_VEGFR} + \text{PROTEIN\_E\_VEGF}$	
321	PROTEIN_M_Wnt8_-_degradation_0	PROTEIN_M_Wnt8_degradation	$\text{PROTEIN\_M\_Wnt8} \xrightarrow{\text{none}} \text{none}$	
322	PROTEIN_M_cB_a_-_degradation_0	PROTEIN_M_cB_a_degradation	$\text{PROTEIN\_M\_cB} \xrightarrow{\text{PROTEIN\_M\_GSK3\_a}} \emptyset$	
323	PROTEIN_M_cB_-_degradation_0	PROTEIN_M_cB_degradation	$\text{PROTEIN\_M\_cB} \xrightarrow{\text{none}} \text{none}$	
324	PROTEIN_M_-_frizzled_a_-_activation_0	PROTEIN_M_frizzled_a_activation	$\text{PROTEIN\_M\_frizzled\_i} \xrightarrow{\text{PROTEIN\_M\_Wnt8}} \text{PROTEIN\_M\_frizzled\_a}$	
325	PROTEIN_M_-_frizzled_a_-_inactivation_0	PROTEIN_M_frizzled_a_inactivation	$\text{PROTEIN\_M\_frizzled\_a} \rightarrow \text{PROTEIN\_M\_frizzled\_i}$	
326	PROTEIN_-_M_nBCF_-_accociation_0	PROTEIN_M_nBCF_accociation	$\text{PROTEIN\_M\_cB} + \text{PROTEIN\_M\_TCF} \rightarrow \text{PROTEIN\_M\_nBCF}$	
327	PROTEIN_-_M_nBCF_-_dissociation_0	PROTEIN_M_nBCF_dissociation	$\text{PROTEIN\_M\_nBCF} \rightarrow \text{PROTEIN\_M\_cB} + \text{PROTEIN\_M\_TCF}$	
328	PROTEIN_M_z13_-_degradation_0	PROTEIN_M_z13_degradation	$\text{PROTEIN\_M\_z13} \xrightarrow{\text{none}} \text{none}$	

Nº	Id	Name	Reaction Equation	SBO
329	PROTEIN_P_Alx1-_degradation_0	PROTEIN_P_Alx1_degradation	PROTEIN_P_Alx1 $\xrightarrow{\text{none}}$ none	
330	PROTEIN-_P_Apobec-_degradation_0	PROTEIN_P_Apobec_degradation	PROTEIN_P_Apobec $\xrightarrow{\text{none}}$ none	
331	PROTEIN-_P_Blimp1-_degradation_0	PROTEIN_P_Blimp1_degradation	PROTEIN_P_Blimp1 $\xrightarrow{\text{none}}$ none	
332	PROTEIN_P_Bra-_degradation_0	PROTEIN_P_Bra_degradation	PROTEIN_P_Bra $\xrightarrow{\text{none}}$ none	
333	PROTEIN_P_Brn-_degradation_0	PROTEIN_P_Brn_degradation	PROTEIN_P_Brn $\xrightarrow{\text{none}}$ none	
334	PROTEIN_P_CAPK-_degradation_0	PROTEIN_P_CAPK_degradation	PROTEIN_P_CAPK $\xrightarrow{\text{none}}$ none	
335	PROTEIN_P_CyP-_degradation_0	PROTEIN_P_CyP_degradation	PROTEIN_P_CyP $\xrightarrow{\text{none}}$ none	
336	PROTEIN-_P_Delta-_activation_0	PROTEIN_P_Delta_activation	PROTEIN_P_Delta2 $\xrightarrow{\text{PROTEIN_P_Nrl}}$ PROTEIN_P_Delta	
337	PROTEIN-_P_Delta-_degradation_0	PROTEIN_P_Delta_degradation	PROTEIN_P_Delta $\xrightarrow{\text{none}}$ none	
338	PROTEIN-_P_Delta-_inactivation_0	PROTEIN_P_Delta_inactivation	PROTEIN_P_Delta $\longrightarrow$ PROTEIN_P_Delta2	
339	PROTEIN_P_Dpt-_degradation_0	PROTEIN_P_Dpt_degradation	PROTEIN_P_Dpt $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
340	PROTEIN_P_Dri-degradation_0	PROTEIN_P_Dri_degradation	PROTEIN_P_Dri $\xrightarrow{\text{none}}$ none	
341	PROTEIN_P_Endo16-degradation_0	PROTEIN_P_Endo16_degradation	PROTEIN_P_Endo16 $\xrightarrow{\text{none}}$ none	
342	PROTEIN_P_Erg-degradation_0	PROTEIN_P_Erg_degradation	PROTEIN_P_Erg $\xrightarrow{\text{none}}$ none	
343	PROTEIN_P_Ets1-degradation_0	PROTEIN_P_Ets1_degradation	PROTEIN_P_Ets1 $\xrightarrow{\text{none}}$ none	
344	PROTEIN_P_Eve-degradation_0	PROTEIN_P_Eve_degradation	PROTEIN_P_Eve $\xrightarrow{\text{none}}$ none	
345	PROTEIN_P_Ficolin-degradation_0	PROTEIN_P_Ficolin_degradation	PROTEIN_P_Ficolin $\xrightarrow{\text{none}}$ none	
346	PROTEIN_P_FoxA-degradation_0	PROTEIN_P_FoxA_degradation	PROTEIN_P_FoxA $\xrightarrow{\text{none}}$ none	
347	PROTEIN_P_FoxB-degradation_0	PROTEIN_P_FoxB_degradation	PROTEIN_P_FoxB $\xrightarrow{\text{none}}$ none	
348	PROTEIN_P_FoxN23-degradation_0	PROTEIN_P_FoxN23_degradation	PROTEIN_P_FoxN23 $\xrightarrow{\text{none}}$ none	
349	PROTEIN_P_FoxO-degradation_0	PROTEIN_P_FoxO_degradation	PROTEIN_P_FoxO $\xrightarrow{\text{none}}$ none	
350	PROTEIN_P_FvMo-degradation_0	PROTEIN_P_FvMo_degradation	PROTEIN_P_FvMo $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
351	PROTEIN_P_GSK3_i_activation_0	PROTEIN_P_GSK3_i_activation	PROTEIN_P_GSK3_a $\xrightarrow{\text{PROTEIN\_P\_frizzled\_a}}$ PROTEIN_P_GSK3_i	
352	PROTEIN_P_GSK3_i_inactivation_0	PROTEIN_P_GSK3_i_inactivation	PROTEIN_P_GSK3_i $\longrightarrow$ PROTEIN_P_GSK3_a	
353	PROTEIN_P_GataC_degradation_0	PROTEIN_P_GataC_degradation	PROTEIN_P_GataC $\xrightarrow{\text{none}}$ none	
354	PROTEIN_P_GataE_degradation_0	PROTEIN_P_GataE_degradation	PROTEIN_P_GataE $\xrightarrow{\text{none}}$ none	
355	PROTEIN_P_Gcad_degradation_0	PROTEIN_P_Gcad_degradation	PROTEIN_P_Gcad $\xrightarrow{\text{none}}$ none	
356	PROTEIN_P_Gcm_degradation_0	PROTEIN_P_Gcm_degradation	PROTEIN_P_Gcm $\xrightarrow{\text{none}}$ none	
357	PROTEIN_P_Gelsolin_degradation_0	PROTEIN_P_Gelsolin_degradation	PROTEIN_P_Gelsolin $\xrightarrow{\text{none}}$ none	
358	PROTEIN_P_GroTCF_accociation_0	PROTEIN_P_GroTCF_accociation	PROTEIN_P_Gro PROTEIN_P_TCF $\longrightarrow$ PROTEIN_P_GroTCF	+
359	PROTEIN_P_GroTCF_dissociation_0	PROTEIN_P_GroTCF_dissociation	PROTEIN_P_GroTCF $\longrightarrow$ PROTEIN_P_Gro PROTEIN_P_TCF	+
360	PROTEIN_P_HesC_degradation_0	PROTEIN_P_HesC_degradation	PROTEIN_P_HesC $\xrightarrow{\text{none}}$ none	

Nº	Id	Name	Reaction Equation	SBO
361	PROTEIN_P_Hex-degradation_0	PROTEIN_P_Hex_degradation	PROTEIN_P_Hex $\xrightarrow{\text{none}}$ none	
362	PROTEIN_P_Hnf6-degradation_0	PROTEIN_P_Hnf6_degradation	PROTEIN_P_Hnf6 $\xrightarrow{\text{none}}$ none	
363	PROTEIN_P_Hox-degradation_0	PROTEIN_P_Hox_degradation	PROTEIN_P_Hox $\xrightarrow{\text{none}}$ none	
364	PROTEIN_P_Kakapo-degradation_0	PROTEIN_P_Kakapo_degradation	PROTEIN_P_Kakapo $\xrightarrow{\text{none}}$ none	
365	PROTEIN_P_L1-degradation_0	PROTEIN_P_L1_degradation	PROTEIN_P_L1 $\xrightarrow{\text{none}}$ none	
366	PROTEIN_P_Lim-degradation_0	PROTEIN_P_Lim_degradation	PROTEIN_P_Lim $\xrightarrow{\text{none}}$ none	
367	PROTEIN_P_Msp130-degradation_0	PROTEIN_P_Msp130_degradation	PROTEIN_P_Msp130 $\xrightarrow{\text{none}}$ none	
368	PROTEIN_P_MspL-degradation_0	PROTEIN_P_MspL_degradation	PROTEIN_P_MspL $\xrightarrow{\text{none}}$ none	
369	PROTEIN_P_Not-degradation_0	PROTEIN_P_Not_degradation	PROTEIN_P_Not $\xrightarrow{\text{none}}$ none	
370	PROTEIN_P_Notch-activation_0	PROTEIN_P_Notch_activation	PROTEIN_P_Notch2 $\xrightarrow{\text{PROTEIN\_P\_Delta2}}$ PROTEIN_P_Notch	
371	PROTEIN_P_Notch-inactivation_0	PROTEIN_P_Notch_inactivation	PROTEIN_P_Notch $\longrightarrow$ PROTEIN_P_Notch2	

Nº	Id	Name	Reaction Equation	SBO
372	PROTEIN_P_Nrl-degradation_0	PROTEIN_P_Nrl_degradation	$\text{PROTEIN\_P\_Nrl} \xrightarrow{\text{none}} \text{none}$	
373	PROTEIN_P_OrCt-degradation_0	PROTEIN_P_OrCt_degradation	$\text{PROTEIN\_P\_OrCt} \xrightarrow{\text{none}} \text{none}$	
374	PROTEIN_P_Otx-degradation_0	PROTEIN_P_Otx_degradation	$\text{PROTEIN\_P\_Otx} \xrightarrow{\text{none}} \text{none}$	
375	PROTEIN_P_Pks-degradation_0	PROTEIN_P_Pks_degradation	$\text{PROTEIN\_P\_Pks} \xrightarrow{\text{none}} \text{none}$	
376	PROTEIN_P_Pmar1-degradation_0	PROTEIN_P_Pmar1_degradation	$\text{PROTEIN\_P\_Pmar1} \xrightarrow{\text{none}} \text{none}$	
377	PROTEIN_P_Sm27-degradation_0	PROTEIN_P_Sm27_degradation	$\text{PROTEIN\_P\_Sm27} \xrightarrow{\text{none}} \text{none}$	
378	PROTEIN_P_Sm30-degradation_0	PROTEIN_P_Sm30_degradation	$\text{PROTEIN\_P\_Sm30} \xrightarrow{\text{none}} \text{none}$	
379	PROTEIN_P_Sm50-degradation_0	PROTEIN_P_Sm50_degradation	$\text{PROTEIN\_P\_Sm50} \xrightarrow{\text{none}} \text{none}$	
380	PROTEIN_P_Snail-degradation_0	PROTEIN_P_Snail_degradation	$\text{PROTEIN\_P\_Snail} \xrightarrow{\text{none}} \text{none}$	
381	PROTEIN_P_SoxB1-degradation_0	PROTEIN_P_SoxB1_degradation	$\text{PROTEIN\_P\_SoxB1} \xrightarrow{\text{none}} \text{none}$	
382	PROTEIN_P_SoxC-degradation_0	PROTEIN_P_SoxC_degradation	$\text{PROTEIN\_P\_SoxC} \xrightarrow{\text{none}} \text{none}$	
383	PROTEIN_P_SuHN-accociation_0	PROTEIN_P_SuHN_accociation	$\text{PROTEIN\_P\_Notch2} + \text{PROTEIN\_P\_SuH} \longrightarrow \text{PROTEIN\_P\_SuHN}$	+

Nº	Id	Name	Reaction Equation	SBO
384	PROTEIN_P_SuHN-_dissociation_0	PROTEIN_P_SuHN_dissociation	PROTEIN_P_SuHN → PROTEIN_P_Notch2 + PROTEIN_P_SuH	
385	PROTEIN_P_SuTx-_degradation_0	PROTEIN_P_SuTx_degradation	PROTEIN_P_SuTx → <sup>none</sup> none	
386	PROTEIN_P_TBr-_degradation_0	PROTEIN_P_TBr_degradation	PROTEIN_P_TBr → <sup>none</sup> none	
387	PROTEIN_P_Tel-_degradation_0	PROTEIN_P_Tel_degradation	PROTEIN_P_Tel → <sup>none</sup> none	
388	PROTEIN_P_Tgif-_degradation_0	PROTEIN_P_Tgif_degradation	PROTEIN_P_Tgif → <sup>none</sup> none	
389	PROTEIN_P-_UbiqAlx1-_degradation_0	PROTEIN_P_UbiqAlx1_degradation	PROTEIN_P_UbiqAlx1 → <sup>none</sup> none	
390	PROTEIN-_P_UbiqES-_degradation_0	PROTEIN_P_UbiqES_degradation	PROTEIN_P_UbiqES → <sup>none</sup> none	
391	PROTEIN_P-_UbiqEts1-_degradation_0	PROTEIN_P_UbiqEts1_degradation	PROTEIN_P_UbiqEts1 → <sup>none</sup> none	
392	PROTEIN_P-_UbiqHesC-_degradation_0	PROTEIN_P_UbiqHesC_degradation	PROTEIN_P_UbiqHesC → <sup>none</sup> none	
393	PROTEIN_P-_UbiqHnf6-_degradation_0	PROTEIN_P_UbiqHnf6_degradation	PROTEIN_P_UbiqHnf6 → <sup>none</sup> none	

Nº	Id	Name	Reaction Equation	SBO
394	PROTEIN_P-_UbiqSoxC-_degradation_0	PROTEIN_P_UbiqSoxC_degradation	PROTEIN_P_UbiqSoxC $\xrightarrow{\text{none}}$ none	
395	PROTEIN_P-_UbiqTel-_degradation_0	PROTEIN_P_UbiqTel_degradation	PROTEIN_P_UbiqTel $\xrightarrow{\text{none}}$ none	
396	PROTEIN-_P_VEGFR-_degradation_0	PROTEIN_P_VEGFR_degradation	PROTEIN_P_VEGFR $\xrightarrow{\text{none}}$ none	
397	PROTEIN_P-_VEGFSignal-_accociation_0	PROTEIN_P_VEGFSignal_accociation	PROTEIN_P_L1 + PROTEIN_P_VEGFR + PROTEIN_E_VEGF $\longrightarrow$ PROTEIN_P_VEGFSignal	
398	PROTEIN_P-_VEGFSignal-_dissociation_0	PROTEIN_P_VEGFSignal_dissociation	PROTEIN_P_VEGFSignal $\longrightarrow$ PROTEIN_P_L1 + PROTEIN_P_VEGFR + PROTEIN_E_VEGF	
399	PROTEIN_P_Wnt8-_degradation_0	PROTEIN_P_Wnt8_degradation	PROTEIN_P_Wnt8 $\xrightarrow{\text{none}}$ none	
400	PROTEIN_P_cB_a-_degradation_0	PROTEIN_P_cB_a_degradation	PROTEIN_P_cB $\xrightarrow{\text{PROTEIN_P_GSK3_a}}$ $\emptyset$	
401	PROTEIN_P_cB-_degradation_0	PROTEIN_P_cB_degradation	PROTEIN_P_cB $\xrightarrow{\text{none}}$ none	
402	PROTEIN_P-_frizzled_a-_activation_0	PROTEIN_P_frizzled_a_activation	PROTEIN_P_frizzled_i $\xrightarrow{\text{PROTEIN_P_Wnt8}}$ PROTEIN_P_frizzled_a	
403	PROTEIN_P-_frizzled_a-_inactivation_0	PROTEIN_P_frizzled_a_inactivation	PROTEIN_P_frizzled_a $\longrightarrow$ PROTEIN_P_frizzled_i	

Nº	Id	Name	Reaction Equation	SBO
404	PROTEIN-_P_nBTcf-_accociation_0	PROTEIN_P_nBTcf_accociation	PROTEIN_P_cB + PROTEIN_P_TCF → PROTEIN_P_nBTcf	
405	PROTEIN-_P_nBTcf-_dissociation_0	PROTEIN_P_nBTcf_dissociation	PROTEIN_P_nBTcf → PROTEIN_P_cB + PROTEIN_P_TCF	
406	PROTEIN_P_z13-_degradation_0	PROTEIN_P_z13_degradation	PROTEIN_P_z13 $\xrightarrow{\text{none}}$ none	
407	P_Ets1_Hill-_Kinetic_0	P_Ets1_Hill_Kinetic	PRE_P_Ets1 → mRNA_P_Ets1	
408	P_Gcad_Hill-_Kinetic_0	P_Gcad_Hill_Kinetic	PRE_P_Gcad → mRNA_P_Gcad	
409	P_L1_Hill-_Kinetic_0	P_L1_Hill_Kinetic	PRE_P_L1 → mRNA_P_L1	
410	P_Otx_Hill-_Kinetic_0	P_Otx_Hill_Kinetic	PRE_P_Otx → mRNA_P_Otx	
411	P_UbiqAlx1-_Hill_Kinetic_0	P_UbiqAlx1_Hill_Kinetic	PRE_P_UbiqAlx1 → mRNA_P_UbiqAlx1	
412	P_UbiqES_Hill-_Kinetic_0	P_UbiqES_Hill_Kinetic	PRE_P_UbiqES → mRNA_P_UbiqES	
413	P_UbiqEts1-_Hill_Kinetic_0	P_UbiqEts1_Hill_Kinetic	PRE_P_UbiqEts1 → mRNA_P_UbiqEts1	
414	P_UbiqHesC-_Hill_Kinetic_0	P_UbiqHesC_Hill_Kinetic	PRE_P_UbiqHesC → mRNA_P_UbiqHesC	
415	P_UbiqHnf6-_Hill_Kinetic_0	P_UbiqHnf6_Hill_Kinetic	PRE_P_UbiqHnf6 → mRNA_P_UbiqHnf6	
416	P_UbiqSoxC-_Hill_Kinetic_0	P_UbiqSoxC_Hill_Kinetic	PRE_P_UbiqSoxC → mRNA_P_UbiqSoxC	

Nº	Id	Name	Reaction Equation	SBO
417	P_UbiqTel_Hill-_Kinetic_0	P_UbiqTel_Hill_Kinetic	$\text{PRE.P\_UbiqTel} \longrightarrow \text{mRNA\_P\_UbiqTel}$	
418	P_cB_Hill-_Kinetic_0	P_cB_Hill_Kinetic	$\text{PRE.P\_cB} \longrightarrow \text{mRNA\_P\_cB}$	
419	mRNA_E_Alx1-_degradation_0	mRNA_E_Alx1_degradation	$\text{mRNA\_E\_Alx1} \xrightarrow{\text{none}} \text{none}$	
420	mRNA_E_Alx1-_translation_0	mRNA_E_Alx1_translation	$\text{none} \xrightarrow{\text{mRNA\_E\_Alx1}} \text{PROTEIN\_E\_Alx1}$	
421	mRNA_E_Apobec-_degradation_0	mRNA_E_Apobec_degradation	$\text{mRNA\_E\_Apobec} \xrightarrow{\text{none}} \text{none}$	
422	mRNA_E_Apobec-_translation_0	mRNA_E_Apobec_translation	$\text{none} \xrightarrow{\text{mRNA\_E\_Apobec}} \text{PROTEIN\_E\_Apobec}$	
423	mRNA_E_Blimp1-_degradation_0	mRNA_E_Blimp1_degradation	$\text{mRNA\_E\_Blimp1} \xrightarrow{\text{none}} \text{none}$	
424	mRNA_E_Blimp1-_translation_0	mRNA_E_Blimp1_translation	$\text{none} \xrightarrow{\text{mRNA\_E\_Blimp1}} \text{PROTEIN\_E\_Blimp1}$	
425	mRNA_E_Bra-_degradation_0	mRNA_E_Bra_degradation	$\text{mRNA\_E\_Bra} \xrightarrow{\text{none}} \text{none}$	
426	mRNA_E_Bra-_translation_0	mRNA_E_Bra_translation	$\text{none} \xrightarrow{\text{mRNA\_E\_Bra}} \text{PROTEIN\_E\_Bra}$	
427	mRNA_E_Brn-_degradation_0	mRNA_E_Brn_degradation	$\text{mRNA\_E\_Brn} \xrightarrow{\text{none}} \text{none}$	
428	mRNA_E_Brn-_translation_0	mRNA_E_Brn_translation	$\text{none} \xrightarrow{\text{mRNA\_E\_Brn}} \text{PROTEIN\_E\_Brn}$	
429	mRNA_E_CAPK-_degradation_0	mRNA_E_CAPK_degradation	$\text{mRNA\_E\_CAPK} \xrightarrow{\text{none}} \text{none}$	

Nº	Id	Name	Reaction Equation	SBO
430	mRNA_E_CAPK-_translation_0	mRNA_E_CAPK_translation	none $\xrightarrow{\text{mRNA\_E\_CAPK}}$ PROTEIN_E_CAPK	
431	mRNA_E_CyP-_degradation_0	mRNA_E_CyP_degradation	$\text{mRNA\_E\_CyP} \xrightarrow{\text{none}} \text{none}$	
432	mRNA_E_CyP-_translation_0	mRNA_E_CyP_translation	none $\xrightarrow{\text{mRNA\_E\_CyP}}$ PROTEIN_E_CyP	
433	mRNA_E_Delta-_degradation_0	mRNA_E_Delta_degradation	$\text{mRNA\_E\_Delta} \xrightarrow{\text{none}} \text{none}$	
434	mRNA_E_Delta-_translation_0	mRNA_E_Delta_translation	none $\xrightarrow{\text{mRNA\_E\_Delta}}$ PROTEIN_E_Delta	
435	mRNA_E_Dpt-_degradation_0	mRNA_E_Dpt_degradation	$\text{mRNA\_E\_Dpt} \xrightarrow{\text{none}} \text{none}$	
436	mRNA_E_Dpt-_translation_0	mRNA_E_Dpt_translation	none $\xrightarrow{\text{mRNA\_E\_Dpt}}$ PROTEIN_E_Dpt	
437	mRNA_E_Dri-_degradation_0	mRNA_E_Dri_degradation	$\text{mRNA\_E\_Dri} \xrightarrow{\text{none}} \text{none}$	
438	mRNA_E_Dri-_translation_0	mRNA_E_Dri_translation	none $\xrightarrow{\text{mRNA\_E\_Dri}}$ PROTEIN_E_Dri	
439	mRNA_E_ES-_degradation_0	mRNA_E_ES_degradation	$\text{mRNA\_E\_ES} \xrightarrow{\text{none}} \text{none}$	
440	mRNA_E_ES-_translation_0	mRNA_E_ES_translation	none $\xrightarrow{\text{mRNA\_E\_ES}}$ PROTEIN_E_ES	
441	mRNA_E_Endo16-_degradation_0	mRNA_E_Endo16_degradation	$\text{mRNA\_E\_Endo16} \xrightarrow{\text{none}} \text{none}$	

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442	mRNA_E_Endo16-_translation_0	mRNA_E_Endo16_translation	none $\xrightarrow{\text{mRNA\_E\_Endo16}}$ PROTEIN_E_Endo16	
443	mRNA_E_Erg-_degradation_0	mRNA_E_Erg_degradation	$\text{mRNA\_E\_Erg} \xrightarrow{\text{none}} \text{none}$	
444	mRNA_E_Erg-_translation_0	mRNA_E_Erg_translation	none $\xrightarrow{\text{mRNA\_E\_Erg}}$ PROTEIN_E_Erg	
445	mRNA_E_Ets1-_degradation_0	mRNA_E_Ets1_degradation	$\text{mRNA\_E\_Ets1} \xrightarrow{\text{none}} \text{none}$	
446	mRNA_E_Ets1-_translation_0	mRNA_E_Ets1_translation	none $\xrightarrow{\text{mRNA\_E\_Ets1}}$ PROTEIN_E_Ets1	
447	mRNA_E_Eve-_degradation_0	mRNA_E_Eve_degradation	$\text{mRNA\_E\_Eve} \xrightarrow{\text{none}} \text{none}$	
448	mRNA_E_Eve-_translation_0	mRNA_E_Eve_translation	none $\xrightarrow{\text{mRNA\_E\_Eve}}$ PROTEIN_E_Eve	
449	mRNA_E_Ficolin-_degradation_0	mRNA_E_Ficolin_degradation	$\text{mRNA\_E\_Ficolin} \xrightarrow{\text{none}} \text{none}$	
450	mRNA_E_Ficolin-_translation_0	mRNA_E_Ficolin_translation	none $\xrightarrow{\text{mRNA\_E\_Ficolin}}$ PROTEIN_E_Ficolin	
451	mRNA_E_FoxA-_degradation_0	mRNA_E_FoxA_degradation	$\text{mRNA\_E\_FoxA} \xrightarrow{\text{none}} \text{none}$	
452	mRNA_E_FoxA-_translation_0	mRNA_E_FoxA_translation	none $\xrightarrow{\text{mRNA\_E\_FoxA}}$ PROTEIN_E_FoxA	
453	mRNA_E_FoxB-_degradation_0	mRNA_E_FoxB_degradation	$\text{mRNA\_E\_FoxB} \xrightarrow{\text{none}} \text{none}$	

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454	mRNA_E_FoxB-_translation_0	mRNA_E_FoxB_translation	none $\xrightarrow{\text{mRNA\_E\_FoxB}} \text{PROTEIN\_E\_FoxB}$	
455	mRNA_E_FoxN23-_degradation_0	mRNA_E_FoxN23_degradation	$\text{mRNA\_E\_FoxN23} \xrightarrow{\text{none}} \text{none}$	
456	mRNA_E_FoxN23-_translation_0	mRNA_E_FoxN23_translation	none $\xrightarrow{\text{mRNA\_E\_FoxN23}} \text{PROTEIN\_E\_FoxN23}$	
457	mRNA_E_FoxO-_degradation_0	mRNA_E_FoxO_degradation	$\text{mRNA\_E\_FoxO} \xrightarrow{\text{none}} \text{none}$	
458	mRNA_E_FoxO-_translation_0	mRNA_E_FoxO_translation	none $\xrightarrow{\text{mRNA\_E\_FoxO}} \text{PROTEIN\_E\_FoxO}$	
459	mRNA_E_FvMo-_degradation_0	mRNA_E_FvMo_degradation	$\text{mRNA\_E\_FvMo} \xrightarrow{\text{none}} \text{none}$	
460	mRNA_E_FvMo-_translation_0	mRNA_E_FvMo_translation	none $\xrightarrow{\text{mRNA\_E\_FvMo}} \text{PROTEIN\_E\_FvMo}$	
461	mRNA_E_GataC-_degradation_0	mRNA_E_GataC_degradation	$\text{mRNA\_E\_GataC} \xrightarrow{\text{none}} \text{none}$	
462	mRNA_E_GataC-_translation_0	mRNA_E_GataC_translation	none $\xrightarrow{\text{mRNA\_E\_GataC}} \text{PROTEIN\_E\_GataC}$	
463	mRNA_E_GataE-_degradation_0	mRNA_E_GataE_degradation	$\text{mRNA\_E\_GataE} \xrightarrow{\text{none}} \text{none}$	
464	mRNA_E_GataE-_translation_0	mRNA_E_GataE_translation	none $\xrightarrow{\text{mRNA\_E\_GataE}} \text{PROTEIN\_E\_GataE}$	
465	mRNA_E_Gcad-_degradation_0	mRNA_E_Gcad_degradation	$\text{mRNA\_E\_Gcad} \xrightarrow{\text{none}} \text{none}$	

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466	mRNA_E_Gcad-_translation_0	mRNA_E_Gcad_translation	none $\xrightarrow{\text{mRNA\_E\_Gcad}}$ PROTEIN_E_Gcad	
467	mRNA_E_Gcm-_degradation_0	mRNA_E_Gcm_degradation	$\text{mRNA\_E\_Gcm} \xrightarrow{\text{none}} \text{none}$	
468	mRNA_E_Gcm-_translation_0	mRNA_E_Gcm_translation	none $\xrightarrow{\text{mRNA\_E\_Gcm}}$ PROTEIN_E_Gcm	
469	mRNA_E-_Gelsolin-_degradation_0	mRNA_E_Gelsolin_degradation	$\text{mRNA\_E\_Gelsolin} \xrightarrow{\text{none}} \text{none}$	
470	mRNA_E-_Gelsolin-_translation_0	mRNA_E_Gelsolin_translation	none $\xrightarrow{\text{mRNA\_E\_Gelsolin}}$ PROTEIN_E_Gelsolin	
471	mRNA_E_HesC-_degradation_0	mRNA_E_HesC_degradation	$\text{mRNA\_E\_HesC} \xrightarrow{\text{none}} \text{none}$	
472	mRNA_E_HesC-_translation_0	mRNA_E_HesC_translation	none $\xrightarrow{\text{mRNA\_E\_HesC}}$ PROTEIN_E_HesC	
473	mRNA_E_Hex-_degradation_0	mRNA_E_Hex_degradation	$\text{mRNA\_E\_Hex} \xrightarrow{\text{none}} \text{none}$	
474	mRNA_E_Hex-_translation_0	mRNA_E_Hex_translation	none $\xrightarrow{\text{mRNA\_E\_Hex}}$ PROTEIN_E_Hex	
475	mRNA_E_Hnf6-_degradation_0	mRNA_E_Hnf6_degradation	$\text{mRNA\_E\_Hnf6} \xrightarrow{\text{none}} \text{none}$	
476	mRNA_E_Hnf6-_translation_0	mRNA_E_Hnf6_translation	none $\xrightarrow{\text{mRNA\_E\_Hnf6}}$ PROTEIN_E_Hnf6	
477	mRNA_E_Hox-_degradation_0	mRNA_E_Hox_degradation	$\text{mRNA\_E\_Hox} \xrightarrow{\text{none}} \text{none}$	

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478	mRNA_E_Hox-_translation_0	mRNA_E_Hox_translation	none $\xrightarrow{\text{mRNA\_E\_Hox}}$ PROTEIN_E_Hox	
479	mRNA_E_Kakapo-_degradation_0	mRNA_E_Kakapo_degradation	$\text{mRNA\_E\_Kakapo} \xrightarrow{\text{none}} \text{none}$	
480	mRNA_E_Kakapo-_translation_0	mRNA_E_Kakapo_translation	none $\xrightarrow{\text{mRNA\_E\_Kakapo}}$ PROTEIN_E_Kakapo	
481	mRNA_E_Lim-_degradation_0	mRNA_E_Lim_degradation	$\text{mRNA\_E\_Lim} \xrightarrow{\text{none}} \text{none}$	
482	mRNA_E_Lim-_translation_0	mRNA_E_Lim_translation	none $\xrightarrow{\text{mRNA\_E\_Lim}}$ PROTEIN_E_Lim	
483	mRNA_E_Msp130-_degradation_0	mRNA_E_Msp130_degradation	$\text{mRNA\_E\_Msp130} \xrightarrow{\text{none}} \text{none}$	
484	mRNA_E_Msp130-_translation_0	mRNA_E_Msp130_translation	none $\xrightarrow{\text{mRNA\_E\_Msp130}}$ PROTEIN_E_Msp130	
485	mRNA_E_MspL-_degradation_0	mRNA_E_MspL_degradation	$\text{mRNA\_E\_MspL} \xrightarrow{\text{none}} \text{none}$	
486	mRNA_E_MspL-_translation_0	mRNA_E_MspL_translation	none $\xrightarrow{\text{mRNA\_E\_MspL}}$ PROTEIN_E_MspL	
487	mRNA_E_Not-_degradation_0	mRNA_E_Not_degradation	$\text{mRNA\_E\_Not} \xrightarrow{\text{none}} \text{none}$	
488	mRNA_E_Not-_translation_0	mRNA_E_Not_translation	none $\xrightarrow{\text{mRNA\_E\_Not}}$ PROTEIN_E_Not	
489	mRNA_E_Notch-_degradation_0	mRNA_E_Notch_degradation	$\text{mRNA\_E\_Notch} \xrightarrow{\text{none}} \text{none}$	

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490	mRNA_E_Notch-_translation_0	mRNA_E_Notch.translation	none $\xrightarrow{\text{mRNA\_E\_Notch}}$ PROTEIN_E_Notch	
491	mRNA_E_Nrl-_degradation_0	mRNA_E_Nrl.degradation	$\text{mRNA\_E\_Nrl} \xrightarrow{\text{none}} \text{none}$	
492	mRNA_E_Nrl-_translation_0	mRNA_E_Nrl.translation	none $\xrightarrow{\text{mRNA\_E\_Nrl}}$ PROTEIN_E_Nrl	
493	mRNA_E_OrCt-_degradation_0	mRNA_E_OrCt.degradation	$\text{mRNA\_E\_OrCt} \xrightarrow{\text{none}} \text{none}$	
494	mRNA_E_OrCt-_translation_0	mRNA_E_OrCt.translation	none $\xrightarrow{\text{mRNA\_E\_OrCt}}$ PROTEIN_E_OrCt	
495	mRNA_E_Otx-_degradation_0	mRNA_E_Otx.degradation	$\text{mRNA\_E\_Otx} \xrightarrow{\text{none}} \text{none}$	
496	mRNA_E_Otx-_translation_0	mRNA_E_Otx.translation	none $\xrightarrow{\text{mRNA\_E\_Otx}}$ PROTEIN_E_Otx	
497	mRNA_E_Pks-_degradation_0	mRNA_E_Pks.degradation	$\text{mRNA\_E\_Pks} \xrightarrow{\text{none}} \text{none}$	
498	mRNA_E_Pks-_translation_0	mRNA_E_Pks.translation	none $\xrightarrow{\text{mRNA\_E\_Pks}}$ PROTEIN_E_Pks	
499	mRNA_E_Pmar1-_degradation_0	mRNA_E_Pmar1.degradation	$\text{mRNA\_E\_Pmar1} \xrightarrow{\text{none}} \text{none}$	
500	mRNA_E_Pmar1-_translation_0	mRNA_E_Pmar1.translation	none $\xrightarrow{\text{mRNA\_E\_Pmar1}}$ PROTEIN_E_Pmar1	
501	mRNA_E_Sm27-_degradation_0	mRNA_E_Sm27.degradation	$\text{mRNA\_E\_Sm27} \xrightarrow{\text{none}} \text{none}$	

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502	mRNA_E_Sm27-_translation_0	mRNA_E_Sm27_translation	none $\xrightarrow{\text{mRNA\_E\_Sm27}}$ PROTEIN_E_Sm27	
503	mRNA_E_Sm30-_degradation_0	mRNA_E_Sm30_degradation	$\text{mRNA\_E\_Sm30} \xrightarrow{\text{none}} \text{none}$	
504	mRNA_E_Sm30-_translation_0	mRNA_E_Sm30_translation	none $\xrightarrow{\text{mRNA\_E\_Sm30}}$ PROTEIN_E_Sm30	
505	mRNA_E_Sm50-_degradation_0	mRNA_E_Sm50_degradation	$\text{mRNA\_E\_Sm50} \xrightarrow{\text{none}} \text{none}$	
506	mRNA_E_Sm50-_translation_0	mRNA_E_Sm50_translation	none $\xrightarrow{\text{mRNA\_E\_Sm50}}$ PROTEIN_E_Sm50	
507	mRNA_E_Snail-_degradation_0	mRNA_E_Snail_degradation	$\text{mRNA\_E\_Snail} \xrightarrow{\text{none}} \text{none}$	
508	mRNA_E_Snail-_translation_0	mRNA_E_Snail_translation	none $\xrightarrow{\text{mRNA\_E\_Snail}}$ PROTEIN_E_Snail	
509	mRNA_E_SoxB1-_degradation_0	mRNA_E_SoxB1_degradation	$\text{mRNA\_E\_SoxB1} \xrightarrow{\text{none}} \text{none}$	
510	mRNA_E_SoxB1-_translation_0	mRNA_E_SoxB1_translation	none $\xrightarrow{\text{mRNA\_E\_SoxB1}}$ PROTEIN_E_SoxB1	
511	mRNA_E_SoxC-_degradation_0	mRNA_E_SoxC_degradation	$\text{mRNA\_E\_SoxC} \xrightarrow{\text{none}} \text{none}$	
512	mRNA_E_SoxC-_translation_0	mRNA_E_SoxC_translation	none $\xrightarrow{\text{mRNA\_E\_SoxC}}$ PROTEIN_E_SoxC	
513	mRNA_E_SuH-_degradation_0	mRNA_E_SuH_degradation	$\text{mRNA\_E\_SuH} \xrightarrow{\text{none}} \text{none}$	

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514	mRNA_E_SuH-_translation_0	mRNA_E_SuH_translation	none $\xrightarrow{\text{mRNA\_E\_SuH}}$ PROTEIN_E_SuH	
515	mRNA_E_SuTx-_degradation_0	mRNA_E_SuTx_degradation	$\text{mRNA\_E\_SuTx} \xrightarrow{\text{none}} \text{none}$	
516	mRNA_E_SuTx-_translation_0	mRNA_E_SuTx_translation	none $\xrightarrow{\text{mRNA\_E\_SuTx}}$ PROTEIN_E_SuTx	
517	mRNA_E_TBr-_degradation_0	mRNA_E_TBr_degradation	$\text{mRNA\_E\_TBr} \xrightarrow{\text{none}} \text{none}$	
518	mRNA_E_TBr-_translation_0	mRNA_E_TBr_translation	none $\xrightarrow{\text{mRNA\_E\_TBr}}$ PROTEIN_E_TBr	
519	mRNA_E_Tel-_degradation_0	mRNA_E_Tel_degradation	$\text{mRNA\_E\_Tel} \xrightarrow{\text{none}} \text{none}$	
520	mRNA_E_Tel-_translation_0	mRNA_E_Tel_translation	none $\xrightarrow{\text{mRNA\_E\_Tel}}$ PROTEIN_E_Tel	
521	mRNA_E_Tgif-_degradation_0	mRNA_E_Tgif_degradation	$\text{mRNA\_E\_Tgif} \xrightarrow{\text{none}} \text{none}$	
522	mRNA_E_Tgif-_translation_0	mRNA_E_Tgif_translation	none $\xrightarrow{\text{mRNA\_E\_Tgif}}$ PROTEIN_E_Tgif	
523	mRNA_E_UMR-_degradation_0	mRNA_E_UMR_degradation	$\text{mRNA\_E\_UMR} \xrightarrow{\text{none}} \text{none}$	
524	mRNA_E_UMR-_translation_0	mRNA_E_UMR_translation	none $\xrightarrow{\text{mRNA\_E\_UMR}}$ PROTEIN_E_UMR	
525	mRNA_E_UVAOtx-_degradation_0	mRNA_E_UVAOtx_degradation	$\text{mRNA\_E\_UVAOtx} \xrightarrow{\text{none}} \text{none}$	

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526	mRNA_E_UVAOtx-_translation_0	mRNA_E_UVAOtx_translation	none $\xrightarrow{\text{mRNA\_E\_UVAOtx}}$ PROTEIN_E_UVAOtx	
527	mRNA_E-_UbiqSoxB1-_degradation_0	mRNA_E_UbiqSoxB1_degradation	$\text{mRNA\_E\_UbiqSoxB1} \xrightarrow{\text{none}} \text{none}$	
528	mRNA_E-_UbiqSoxB1-_translation_0	mRNA_E_UbiqSoxB1_translation	none $\xrightarrow{\text{mRNA\_E\_UbiqSoxB1}}$ PROTEIN_E_UbiqSoxB1	
529	mRNA_E_VEGFR-_degradation_0	mRNA_E_VEGFR_degradation	$\text{mRNA\_E\_VEGFR} \xrightarrow{\text{none}} \text{none}$	
530	mRNA_E_VEGFR-_translation_0	mRNA_E_VEGFR_translation	none $\xrightarrow{\text{mRNA\_E\_VEGFR}}$ PROTEIN_E_VEGFR	
531	mRNA_E_VEGF-_degradation_0	mRNA_E_VEGF_degradation	$\text{mRNA\_E\_VEGF} \xrightarrow{\text{none}} \text{none}$	
532	mRNA_E_VEGF-_translation_0	mRNA_E_VEGF_translation	none $\xrightarrow{\text{mRNA\_E\_VEGF}}$ PROTEIN_E_VEGF	
533	mRNA_E_Wnt8-_degradation_0	mRNA_E_Wnt8_degradation	$\text{mRNA\_E\_Wnt8} \xrightarrow{\text{none}} \text{none}$	
534	mRNA_E_Wnt8-_translation_0	mRNA_E_Wnt8_translation	none $\xrightarrow{\text{mRNA\_E\_Wnt8}}$ PROTEIN_E_Wnt8	
535	mRNA_E_cB-_degradation_0	mRNA_E_cB_degradation	$\text{mRNA\_E\_cB} \xrightarrow{\text{none}} \text{none}$	
536	mRNA_E_cB-_translation_0	mRNA_E_cB_translation	none $\xrightarrow{\text{mRNA\_E\_cB}}$ PROTEIN_E_cB	

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537	mRNA_E_z13-degradation_0	mRNA_E_z13_degradation	$\text{mRNA\_E\_z13} \xrightarrow{\text{none}} \text{none}$	
538	mRNA_E_z13-translation_0	mRNA_E_z13_translation	$\text{none} \xrightarrow{\text{mRNA\_E\_z13}} \text{PROTEIN\_E\_z13}$	
539	mRNA_M_Alx1-degradation_0	mRNA_M_Alx1_degradation	$\text{mRNA\_M\_Alx1} \xrightarrow{\text{none}} \text{none}$	
540	mRNA_M_Alx1-translation_0	mRNA_M_Alx1_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Alx1}} \text{PROTEIN\_M\_Alx1}$	
541	mRNA_M_Apobec-degradation_0	mRNA_M_Apobec_degradation	$\text{mRNA\_M\_Apobec} \xrightarrow{\text{none}} \text{none}$	
542	mRNA_M_Apobec-translation_0	mRNA_M_Apobec_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Apobec}} \text{PROTEIN\_M\_Apobec}$	
543	mRNA_M_Blimp1-degradation_0	mRNA_M_Blimp1_degradation	$\text{mRNA\_M\_Blimp1} \xrightarrow{\text{none}} \text{none}$	
544	mRNA_M_Blimp1-translation_0	mRNA_M_Blimp1_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Blimp1}} \text{PROTEIN\_M\_Blimp1}$	
545	mRNA_M_Bra-degradation_0	mRNA_M_Bra_degradation	$\text{mRNA\_M\_Bra} \xrightarrow{\text{none}} \text{none}$	
546	mRNA_M_Bra-translation_0	mRNA_M_Bra_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Bra}} \text{PROTEIN\_M\_Bra}$	
547	mRNA_M_Brn-degradation_0	mRNA_M_Brn_degradation	$\text{mRNA\_M\_Brn} \xrightarrow{\text{none}} \text{none}$	
548	mRNA_M_Brn-translation_0	mRNA_M_Brn_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Brn}} \text{PROTEIN\_M\_Brn}$	

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549	mRNA_M_CAPK-degradation_0	mRNA_M_CAPK_degradation	$\text{mRNA\_M\_CAPK} \xrightarrow{\text{none}} \text{none}$	
550	mRNA_M_CAPK-translation_0	mRNA_M_CAPK_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_CAPK}} \text{PROTEIN\_M\_CAPK}$	
551	mRNA_M_CyP-degradation_0	mRNA_M_CyP_degradation	$\text{mRNA\_M\_CyP} \xrightarrow{\text{none}} \text{none}$	
552	mRNA_M_CyP-translation_0	mRNA_M_CyP_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_CyP}} \text{PROTEIN\_M\_CyP}$	
553	mRNA_M_Delta-degradation_0	mRNA_M_Delta_degradation	$\text{mRNA\_M\_Delta} \xrightarrow{\text{none}} \text{none}$	
554	mRNA_M_Delta-translation_0	mRNA_M_Delta_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Delta}} \text{PROTEIN\_M\_Delta}$	
555	mRNA_M_Dpt-degradation_0	mRNA_M_Dpt_degradation	$\text{mRNA\_M\_Dpt} \xrightarrow{\text{none}} \text{none}$	
556	mRNA_M_Dpt-translation_0	mRNA_M_Dpt_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Dpt}} \text{PROTEIN\_M\_Dpt}$	
557	mRNA_M_Dri-degradation_0	mRNA_M_Dri_degradation	$\text{mRNA\_M\_Dri} \xrightarrow{\text{none}} \text{none}$	
558	mRNA_M_Dri-translation_0	mRNA_M_Dri_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Dri}} \text{PROTEIN\_M\_Dri}$	
559	mRNA_M_Endo16-degradation_0	mRNA_M_Endo16_degradation	$\text{mRNA\_M\_Endo16} \xrightarrow{\text{none}} \text{none}$	
560	mRNA_M_Endo16-translation_0	mRNA_M_Endo16_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Endo16}} \text{PROTEIN\_M\_Endo16}$	

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561	mRNA_M_Erg_degradation_0	mRNA_M_Erg_degradation	$\text{mRNA\_M\_Erg} \xrightarrow{\text{none}} \text{none}$	
562	mRNA_M_Erg_translation_0	mRNA_M_Erg_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Erg}} \text{PROTEIN\_M\_Erg}$	
563	mRNA_M_Ets1_degradation_0	mRNA_M_Ets1_degradation	$\text{mRNA\_M\_Ets1} \xrightarrow{\text{none}} \text{none}$	
564	mRNA_M_Ets1_translation_0	mRNA_M_Ets1_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Ets1}} \text{PROTEIN\_M\_Ets1}$	
565	mRNA_M_Eve_degradation_0	mRNA_M_Eve_degradation	$\text{mRNA\_M\_Eve} \xrightarrow{\text{none}} \text{none}$	
566	mRNA_M_Eve_translation_0	mRNA_M_Eve_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Eve}} \text{PROTEIN\_M\_Eve}$	
567	mRNA_M_Ficolin_degradation_0	mRNA_M_Ficolin_degradation	$\text{mRNA\_M\_Ficolin} \xrightarrow{\text{none}} \text{none}$	
568	mRNA_M_Ficolin_translation_0	mRNA_M_Ficolin_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Ficolin}} \text{PROTEIN\_M\_Ficolin}$	
569	mRNA_M_FoxA_degradation_0	mRNA_M_FoxA_degradation	$\text{mRNA\_M\_FoxA} \xrightarrow{\text{none}} \text{none}$	
570	mRNA_M_FoxA_translation_0	mRNA_M_FoxA_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_FoxA}} \text{PROTEIN\_M\_FoxA}$	
571	mRNA_M_FoxB_degradation_0	mRNA_M_FoxB_degradation	$\text{mRNA\_M\_FoxB} \xrightarrow{\text{none}} \text{none}$	
572	mRNA_M_FoxB_translation_0	mRNA_M_FoxB_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_FoxB}} \text{PROTEIN\_M\_FoxB}$	

Nº	Id	Name	Reaction Equation	SBO
573	mRNA_M_FoxN23-degradation_0	mRNA_M_FoxN23_degradation	$\text{mRNA\_M\_FoxN23} \xrightarrow{\text{none}} \text{none}$	
574	mRNA_M_FoxN23-translation_0	mRNA_M_FoxN23_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_FoxN23}} \text{PROTEIN\_M\_FoxN23}$	
575	mRNA_M_FoxO-degradation_0	mRNA_M_FoxO_degradation	$\text{mRNA\_M\_FoxO} \xrightarrow{\text{none}} \text{none}$	
576	mRNA_M_FoxO-translation_0	mRNA_M_FoxO_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_FoxO}} \text{PROTEIN\_M\_FoxO}$	
577	mRNA_M_FvMo-degradation_0	mRNA_M_FvMo_degradation	$\text{mRNA\_M\_FvMo} \xrightarrow{\text{none}} \text{none}$	
578	mRNA_M_FvMo-translation_0	mRNA_M_FvMo_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_FvMo}} \text{PROTEIN\_M\_FvMo}$	
579	mRNA_M_GataC-degradation_0	mRNA_M_GataC_degradation	$\text{mRNA\_M\_GataC} \xrightarrow{\text{none}} \text{none}$	
580	mRNA_M_GataC-translation_0	mRNA_M_GataC_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_GataC}} \text{PROTEIN\_M\_GataC}$	
581	mRNA_M_GataE-degradation_0	mRNA_M_GataE_degradation	$\text{mRNA\_M\_GataE} \xrightarrow{\text{none}} \text{none}$	
582	mRNA_M_GataE-translation_0	mRNA_M_GataE_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_GataE}} \text{PROTEIN\_M\_GataE}$	
583	mRNA_M_Gcad-degradation_0	mRNA_M_Gcad_degradation	$\text{mRNA\_M\_Gcad} \xrightarrow{\text{none}} \text{none}$	
584	mRNA_M_Gcad-translation_0	mRNA_M_Gcad_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Gcad}} \text{PROTEIN\_M\_Gcad}$	

Nº	Id	Name	Reaction Equation	SBO
585	mRNA_M_Gcm_degradation_0	mRNA_M_Gcm_degradation	$\text{mRNA\_M\_Gcm} \xrightarrow{\text{none}} \text{none}$	
586	mRNA_M_Gcm_translation_0	mRNA_M_Gcm_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Gcm}} \text{PROTEIN\_M\_Gcm}$	
587	mRNA_M_Gelsolin_degradation_0	mRNA_M_Gelsolin_degradation	$\text{mRNA\_M\_Gelsolin} \xrightarrow{\text{none}} \text{none}$	
588	mRNA_M_Gelsolin_translation_0	mRNA_M_Gelsolin_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Gelsolin}} \text{PROTEIN\_M\_Gelsolin}$	
589	mRNA_M_HesC_degradation_0	mRNA_M_HesC_degradation	$\text{mRNA\_M\_HesC} \xrightarrow{\text{none}} \text{none}$	
590	mRNA_M_HesC_translation_0	mRNA_M_HesC_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_HesC}} \text{PROTEIN\_M\_HesC}$	
591	mRNA_M_Hex_degradation_0	mRNA_M_Hex_degradation	$\text{mRNA\_M\_Hex} \xrightarrow{\text{none}} \text{none}$	
592	mRNA_M_Hex_translation_0	mRNA_M_Hex_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Hex}} \text{PROTEIN\_M\_Hex}$	
593	mRNA_M_Hnf6_degradation_0	mRNA_M_Hnf6_degradation	$\text{mRNA\_M\_Hnf6} \xrightarrow{\text{none}} \text{none}$	
594	mRNA_M_Hnf6_translation_0	mRNA_M_Hnf6_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Hnf6}} \text{PROTEIN\_M\_Hnf6}$	
595	mRNA_M_Hox_degradation_0	mRNA_M_Hox_degradation	$\text{mRNA\_M\_Hox} \xrightarrow{\text{none}} \text{none}$	
596	mRNA_M_Hox_translation_0	mRNA_M_Hox_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Hox}} \text{PROTEIN\_M\_Hox}$	

Nº	Id	Name	Reaction Equation	SBO
597	mRNA_M_Kakapo_degradation_0	mRNA_M_Kakapo_degradation	$\text{mRNA\_M\_Kakapo} \xrightarrow{\text{none}} \text{none}$	
598	mRNA_M_Kakapo_translation_0	mRNA_M_Kakapo_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Kakapo}} \text{PROTEIN\_M\_Kakapo}$	
599	mRNA_M_Lim_degradation_0	mRNA_M_Lim_degradation	$\text{mRNA\_M\_Lim} \xrightarrow{\text{none}} \text{none}$	
600	mRNA_M_Lim_translation_0	mRNA_M_Lim_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Lim}} \text{PROTEIN\_M\_Lim}$	
601	mRNA_M_Msp130_degradation_0	mRNA_M_Msp130_degradation	$\text{mRNA\_M\_Msp130} \xrightarrow{\text{none}} \text{none}$	
602	mRNA_M_Msp130_translation_0	mRNA_M_Msp130_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Msp130}} \text{PROTEIN\_M\_Msp130}$	
603	mRNA_M_MspL_degradation_0	mRNA_M_MspL_degradation	$\text{mRNA\_M\_MspL} \xrightarrow{\text{none}} \text{none}$	
604	mRNA_M_MspL_translation_0	mRNA_M_MspL_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_MspL}} \text{PROTEIN\_M\_MspL}$	
605	mRNA_M_Not_degradation_0	mRNA_M_Not_degradation	$\text{mRNA\_M\_Not} \xrightarrow{\text{none}} \text{none}$	
606	mRNA_M_Not_translation_0	mRNA_M_Not_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Not}} \text{PROTEIN\_M\_Not}$	
607	mRNA_M_Notch_degradation_0	mRNA_M_Notch_degradation	$\text{mRNA\_M\_Notch} \xrightarrow{\text{none}} \text{none}$	
608	mRNA_M_Notch_translation_0	mRNA_M_Notch_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Notch}} \text{PROTEIN\_M\_Notch}$	

Nº	Id	Name	Reaction Equation	SBO
609	mRNA_M_Nrl-_degradation_0	mRNA_M_Nrl_degradation	$\text{mRNA\_M\_Nrl} \xrightarrow{\text{none}} \text{none}$	
610	mRNA_M_Nrl-_translation_0	mRNA_M_Nrl_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Nrl}} \text{PROTEIN\_M\_Nrl}$	
611	mRNA_M_OrCt-_degradation_0	mRNA_M_OrCt_degradation	$\text{mRNA\_M\_OrCt} \xrightarrow{\text{none}} \text{none}$	
612	mRNA_M_OrCt-_translation_0	mRNA_M_OrCt_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_OrCt}} \text{PROTEIN\_M\_OrCt}$	
613	mRNA_M_Otx-_degradation_0	mRNA_M_Otx_degradation	$\text{mRNA\_M\_Otx} \xrightarrow{\text{none}} \text{none}$	
614	mRNA_M_Otx-_translation_0	mRNA_M_Otx_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Otx}} \text{PROTEIN\_M\_Otx}$	
615	mRNA_M_Pks-_degradation_0	mRNA_M_Pks_degradation	$\text{mRNA\_M\_Pks} \xrightarrow{\text{none}} \text{none}$	
616	mRNA_M_Pks-_translation_0	mRNA_M_Pks_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Pks}} \text{PROTEIN\_M\_Pks}$	
617	mRNA_M_Pmar1-_degradation_0	mRNA_M_Pmar1_degradation	$\text{mRNA\_M\_Pmar1} \xrightarrow{\text{none}} \text{none}$	
618	mRNA_M_Pmar1-_translation_0	mRNA_M_Pmar1_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Pmar1}} \text{PROTEIN\_M\_Pmar1}$	
619	mRNA_M_Sm27-_degradation_0	mRNA_M_Sm27_degradation	$\text{mRNA\_M\_Sm27} \xrightarrow{\text{none}} \text{none}$	
620	mRNA_M_Sm27-_translation_0	mRNA_M_Sm27_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Sm27}} \text{PROTEIN\_M\_Sm27}$	

Nº	Id	Name	Reaction Equation	SBO
621	mRNA_M_Sm30-degradation_0	mRNA_M_Sm30_degradation	$\text{mRNA\_M\_Sm30} \xrightarrow{\text{none}} \text{none}$	
622	mRNA_M_Sm30-translation_0	mRNA_M_Sm30_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Sm30}} \text{PROTEIN\_M\_Sm30}$	
623	mRNA_M_Sm50-degradation_0	mRNA_M_Sm50_degradation	$\text{mRNA\_M\_Sm50} \xrightarrow{\text{none}} \text{none}$	
624	mRNA_M_Sm50-translation_0	mRNA_M_Sm50_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Sm50}} \text{PROTEIN\_M\_Sm50}$	
625	mRNA_M_Snail-degradation_0	mRNA_M_Snail_degradation	$\text{mRNA\_M\_Snail} \xrightarrow{\text{none}} \text{none}$	
626	mRNA_M_Snail-translation_0	mRNA_M_Snail_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Snail}} \text{PROTEIN\_M\_Snail}$	
627	mRNA_M_SoxB1-degradation_0	mRNA_M_SoxB1_degradation	$\text{mRNA\_M\_SoyB1} \xrightarrow{\text{none}} \text{none}$	
628	mRNA_M_SoxB1-translation_0	mRNA_M_SoxB1_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_SoyB1}} \text{PROTEIN\_M\_SoyB1}$	
629	mRNA_M_SoxC-degradation_0	mRNA_M_SoxC_degradation	$\text{mRNA\_M\_SoyC} \xrightarrow{\text{none}} \text{none}$	
630	mRNA_M_SoxC-translation_0	mRNA_M_SoxC_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_SoyC}} \text{PROTEIN\_M\_SoyC}$	
631	mRNA_M_SuH-degradation_0	mRNA_M_SuH_degradation	$\text{mRNA\_M\_SuH} \xrightarrow{\text{none}} \text{none}$	
632	mRNA_M_SuH-translation_0	mRNA_M_SuH_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_SuH}} \text{PROTEIN\_M\_SuH}$	

Nº	Id	Name	Reaction Equation	SBO
633	mRNA_M_SuTx-degradation_0	mRNA_M_SuTx_degradation	$\text{mRNA\_M\_SuTx} \xrightarrow{\text{none}} \text{none}$	
634	mRNA_M_SuTx-translation_0	mRNA_M_SuTx_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_SuTx}} \text{PROTEIN\_M\_SuTx}$	
635	mRNA_M_TBr-degradation_0	mRNA_M_TBr_degradation	$\text{mRNA\_M\_TBr} \xrightarrow{\text{none}} \text{none}$	
636	mRNA_M_TBr-translation_0	mRNA_M_TBr_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_TBr}} \text{PROTEIN\_M\_TBr}$	
637	mRNA_M_Tel-degradation_0	mRNA_M_Tel_degradation	$\text{mRNA\_M\_Tel} \xrightarrow{\text{none}} \text{none}$	
638	mRNA_M_Tel-translation_0	mRNA_M_Tel_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Tel}} \text{PROTEIN\_M\_Tel}$	
639	mRNA_M_Tgif-degradation_0	mRNA_M_Tgif_degradation	$\text{mRNA\_M\_Tgif} \xrightarrow{\text{none}} \text{none}$	
640	mRNA_M_Tgif-translation_0	mRNA_M_Tgif_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_Tgif}} \text{PROTEIN\_M\_Tgif}$	
641	mRNA_M_UMADelta-degradation_0	mRNA_M_UMADelta_degradation	$\text{mRNA\_M\_UMADelta} \xrightarrow{\text{none}} \text{none}$	
642	mRNA_M_UMADelta-translation_0	mRNA_M_UMADelta_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_UMADelta}} \text{PROTEIN\_M\_UMADelta}$	
643	mRNA_M_UMANrl-degradation_0	mRNA_M_UMANrl_degradation	$\text{mRNA\_M\_UMANrl} \xrightarrow{\text{none}} \text{none}$	

Nº	Id	Name	Reaction Equation	SBO
644	mRNA_M_UMANrl-_translation_0	mRNA_M_UMANrl.translation	none $\xrightarrow{\text{mRNA\_M\_UMANrl}}$ PROTEIN_M_UMANrl	
645	mRNA_M_UMR-_degradation_0	mRNA_M_UMR.degradation	$\text{mRNA\_M\_UMR} \xrightarrow{\text{none}} \text{none}$	
646	mRNA_M_UMR-_translation_0	mRNA_M_UMR.translation	none $\xrightarrow{\text{mRNA\_M\_UMR}}$ PROTEIN_M_UMR	
647	mRNA_M-_UbiqSoxB1-_degradation_0	mRNA_M_UbiqSoxB1.degradation	$\text{mRNA\_M\_UbiqSoxB1} \xrightarrow{\text{none}} \text{none}$	
648	mRNA_M-_UbiqSoxB1-_translation_0	mRNA_M_UbiqSoxB1.translation	none $\xrightarrow{\text{mRNA\_M\_UbiqSoxB1}}$ PROTEIN_M_UbiqSoxB1	
649	mRNA_M_VEGFR-_degradation_0	mRNA_M_VEGFR.degradation	$\text{mRNA\_M\_VEGFR} \xrightarrow{\text{none}} \text{none}$	
650	mRNA_M_VEGFR-_translation_0	mRNA_M_VEGFR.translation	none $\xrightarrow{\text{mRNA\_M\_VEGFR}}$ PROTEIN_M_VEGFR	
651	mRNA_M_Wnt8-_degradation_0	mRNA_M_Wnt8.degradation	$\text{mRNA\_M\_Wnt8} \xrightarrow{\text{none}} \text{none}$	
652	mRNA_M_Wnt8-_translation_0	mRNA_M_Wnt8.translation	none $\xrightarrow{\text{mRNA\_M\_Wnt8}}$ PROTEIN_M_Wnt8	
653	mRNA_M_cB-_degradation_0	mRNA_M_cB.degradation	$\text{mRNA\_M\_cB} \xrightarrow{\text{none}} \text{none}$	
654	mRNA_M_cB-_translation_0	mRNA_M_cB.translation	none $\xrightarrow{\text{mRNA\_M\_cB}}$ PROTEIN_M_cB	

Nº	Id	Name	Reaction Equation	SBO
655	mRNA_M_z13-degradation_0	mRNA_M_z13_degradation	$\text{mRNA\_M\_z13} \xrightarrow{\text{none}} \text{none}$	
656	mRNA_M_z13-translation_0	mRNA_M_z13_translation	$\text{none} \xrightarrow{\text{mRNA\_M\_z13}} \text{PROTEIN\_M\_z13}$	
657	mRNA_P_Alx1-degradation_0	mRNA_P_Alx1_degradation	$\text{mRNA\_P\_Alx1} \xrightarrow{\text{none}} \text{none}$	
658	mRNA_P_Alx1-translation_0	mRNA_P_Alx1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Alx1}} \text{PROTEIN\_P\_Alx1}$	
659	mRNA_P_Apobec-degradation_0	mRNA_P_Apobec_degradation	$\text{mRNA\_P\_Apobec} \xrightarrow{\text{none}} \text{none}$	
660	mRNA_P_Apobec-translation_0	mRNA_P_Apobec_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Apobec}} \text{PROTEIN\_P\_Apobec}$	
661	mRNA_P_Blimp1-degradation_0	mRNA_P_Blimp1_degradation	$\text{mRNA\_P\_Blimp1} \xrightarrow{\text{none}} \text{none}$	
662	mRNA_P_Blimp1-translation_0	mRNA_P_Blimp1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Blimp1}} \text{PROTEIN\_P\_Blimp1}$	
663	mRNA_P_Bra-degradation_0	mRNA_P_Bra_degradation	$\text{mRNA\_P\_Bra} \xrightarrow{\text{none}} \text{none}$	
664	mRNA_P_Bra-translation_0	mRNA_P_Bra_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Bra}} \text{PROTEIN\_P\_Bra}$	
665	mRNA_P_Brn-degradation_0	mRNA_P_Brn_degradation	$\text{mRNA\_P\_Brn} \xrightarrow{\text{none}} \text{none}$	
666	mRNA_P_Brn-translation_0	mRNA_P_Brn_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Brn}} \text{PROTEIN\_P\_Brn}$	

Nº	Id	Name	Reaction Equation	SBO
667	mRNA_P_CAPK-degradation_0	mRNA_P_CAPK_degradation	$\text{mRNA\_P\_CAPK} \xrightarrow{\text{none}} \text{none}$	
668	mRNA_P_CAPK-translation_0	mRNA_P_CAPK_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_CAPK}} \text{PROTEIN\_P\_CAPK}$	
669	mRNA_P_CyP-degradation_0	mRNA_P_CyP_degradation	$\text{mRNA\_P\_CyP} \xrightarrow{\text{none}} \text{none}$	
670	mRNA_P_CyP-translation_0	mRNA_P_CyP_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_CyP}} \text{PROTEIN\_P\_CyP}$	
671	mRNA_P_Delta-degradation_0	mRNA_P_Delta_degradation	$\text{mRNA\_P\_Delta} \xrightarrow{\text{none}} \text{none}$	
672	mRNA_P_Delta-translation_0	mRNA_P_Delta_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Delta}} \text{PROTEIN\_P\_Delta}$	
673	mRNA_P_Dpt-degradation_0	mRNA_P_Dpt_degradation	$\text{mRNA\_P\_Dpt} \xrightarrow{\text{none}} \text{none}$	
674	mRNA_P_Dpt-translation_0	mRNA_P_Dpt_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Dpt}} \text{PROTEIN\_P\_Dpt}$	
675	mRNA_P_Dri-degradation_0	mRNA_P_Dri_degradation	$\text{mRNA\_P\_Dri} \xrightarrow{\text{none}} \text{none}$	
676	mRNA_P_Dri-translation_0	mRNA_P_Dri_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Dri}} \text{PROTEIN\_P\_Dri}$	
677	mRNA_P_Endo16-degradation_0	mRNA_P_Endo16_degradation	$\text{mRNA\_P\_Endo16} \xrightarrow{\text{none}} \text{none}$	
678	mRNA_P_Endo16-translation_0	mRNA_P_Endo16_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Endo16}} \text{PROTEIN\_P\_Endo16}$	

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679	mRNA_P_Erg_degradation_0	mRNA_P_Erg_degradation	$\text{mRNA\_P\_Erg} \xrightarrow{\text{none}} \text{none}$	
680	mRNA_P_Erg_translation_0	mRNA_P_Erg_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Erg}} \text{PROTEIN\_P\_Erg}$	
681	mRNA_P_Ets1_degradation_0	mRNA_P_Ets1_degradation	$\text{mRNA\_P\_Ets1} \xrightarrow{\text{none}} \text{none}$	
682	mRNA_P_Ets1_translation_0	mRNA_P_Ets1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Ets1}} \text{PROTEIN\_P\_Ets1}$	
683	mRNA_P_Eve_degradation_0	mRNA_P_Eve_degradation	$\text{mRNA\_P\_Eve} \xrightarrow{\text{none}} \text{none}$	
684	mRNA_P_Eve_translation_0	mRNA_P_Eve_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Eve}} \text{PROTEIN\_P\_Eve}$	
685	mRNA_P_Ficolin_degradation_0	mRNA_P_Ficolin_degradation	$\text{mRNA\_P\_Ficolin} \xrightarrow{\text{none}} \text{none}$	
686	mRNA_P_Ficolin_translation_0	mRNA_P_Ficolin_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Ficolin}} \text{PROTEIN\_P\_Ficolin}$	
687	mRNA_P_FoxA_degradation_0	mRNA_P_FoxA_degradation	$\text{mRNA\_P\_FoxA} \xrightarrow{\text{none}} \text{none}$	
688	mRNA_P_FoxA_translation_0	mRNA_P_FoxA_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_FoxA}} \text{PROTEIN\_P\_FoxA}$	
689	mRNA_P_FoxB_degradation_0	mRNA_P_FoxB_degradation	$\text{mRNA\_P\_FoxB} \xrightarrow{\text{none}} \text{none}$	
690	mRNA_P_FoxB_translation_0	mRNA_P_FoxB_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_FoxB}} \text{PROTEIN\_P\_FoxB}$	

Nº	Id	Name	Reaction Equation	SBO
691	mRNA_P_FoxN23-degradation_0	mRNA_P_FoxN23_degradation	$\text{mRNA\_P\_FoxN23} \xrightarrow{\text{none}} \text{none}$	
692	mRNA_P_FoxN23-translation_0	mRNA_P_FoxN23_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_FoxN23}} \text{PROTEIN\_P\_FoxN23}$	
693	mRNA_P_FoxO-degradation_0	mRNA_P_FoxO_degradation	$\text{mRNA\_P\_FoxO} \xrightarrow{\text{none}} \text{none}$	
694	mRNA_P_FoxO-translation_0	mRNA_P_FoxO_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_FoxO}} \text{PROTEIN\_P\_FoxO}$	
695	mRNA_P_FvMo-degradation_0	mRNA_P_FvMo_degradation	$\text{mRNA\_P\_FvMo} \xrightarrow{\text{none}} \text{none}$	
696	mRNA_P_FvMo-translation_0	mRNA_P_FvMo_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_FvMo}} \text{PROTEIN\_P\_FvMo}$	
697	mRNA_P_GataC-degradation_0	mRNA_P_GataC_degradation	$\text{mRNA\_P\_GataC} \xrightarrow{\text{none}} \text{none}$	
698	mRNA_P_GataC-translation_0	mRNA_P_GataC_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_GataC}} \text{PROTEIN\_P\_GataC}$	
699	mRNA_P_GataE-degradation_0	mRNA_P_GataE_degradation	$\text{mRNA\_P\_GataE} \xrightarrow{\text{none}} \text{none}$	
700	mRNA_P_GataE-translation_0	mRNA_P_GataE_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_GataE}} \text{PROTEIN\_P\_GataE}$	
701	mRNA_P_Gcad-degradation_0	mRNA_P_Gcad_degradation	$\text{mRNA\_P\_Gcad} \xrightarrow{\text{none}} \text{none}$	
702	mRNA_P_Gcad-translation_0	mRNA_P_Gcad_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Gcad}} \text{PROTEIN\_P\_Gcad}$	

Nº	Id	Name	Reaction Equation	SBO
703	mRNA_P_Gcm_degradation_0	mRNA_P_Gcm_degradation	$\text{mRNA\_P\_Gcm} \xrightarrow{\text{none}} \text{none}$	
704	mRNA_P_Gcm_translation_0	mRNA_P_Gcm_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Gcm}} \text{PROTEIN\_P\_Gcm}$	
705	mRNA_P_Gelsolin_degradation_0	mRNA_P_Gelsolin_degradation	$\text{mRNA\_P\_Gelsolin} \xrightarrow{\text{none}} \text{none}$	
706	mRNA_P_Gelsolin_translation_0	mRNA_P_Gelsolin_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Gelsolin}} \text{PROTEIN\_P\_Gelsolin}$	
707	mRNA_P_HesC_degradation_0	mRNA_P_HesC_degradation	$\text{mRNA\_P\_HesC} \xrightarrow{\text{none}} \text{none}$	
708	mRNA_P_HesC_translation_0	mRNA_P_HesC_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_HesC}} \text{PROTEIN\_P\_HesC}$	
709	mRNA_P_Hex_degradation_0	mRNA_P_Hex_degradation	$\text{mRNA\_P\_Hex} \xrightarrow{\text{none}} \text{none}$	
710	mRNA_P_Hex_translation_0	mRNA_P_Hex_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Hex}} \text{PROTEIN\_P\_Hex}$	
711	mRNA_P_Hnf6_degradation_0	mRNA_P_Hnf6_degradation	$\text{mRNA\_P\_Hnf6} \xrightarrow{\text{none}} \text{none}$	
712	mRNA_P_Hnf6_translation_0	mRNA_P_Hnf6_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Hnf6}} \text{PROTEIN\_P\_Hnf6}$	
713	mRNA_P_Hox_degradation_0	mRNA_P_Hox_degradation	$\text{mRNA\_P\_Hox} \xrightarrow{\text{none}} \text{none}$	
714	mRNA_P_Hox_translation_0	mRNA_P_Hox_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Hox}} \text{PROTEIN\_P\_Hox}$	

Nº	Id	Name	Reaction Equation	SBO
715	mRNA_P_Kakapo_degradation_0	mRNA_P_Kakapo_degradation	$\text{mRNA\_P\_Kakapo} \xrightarrow{\text{none}} \text{none}$	
716	mRNA_P_Kakapo_translation_0	mRNA_P_Kakapo_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Kakapo}} \text{PROTEIN\_P\_Kakapo}$	
717	mRNA_P_L1_degradation_0	mRNA_P_L1_degradation	$\text{mRNA\_P\_L1} \xrightarrow{\text{none}} \text{none}$	
718	mRNA_P_L1_translation_0	mRNA_P_L1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_L1}} \text{PROTEIN\_P\_L1}$	
719	mRNA_P_Lim_degradation_0	mRNA_P_Lim_degradation	$\text{mRNA\_P\_Lim} \xrightarrow{\text{none}} \text{none}$	
720	mRNA_P_Lim_translation_0	mRNA_P_Lim_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Lim}} \text{PROTEIN\_P\_Lim}$	
721	mRNA_P_Msp130_degradation_0	mRNA_P_Msp130_degradation	$\text{mRNA\_P\_Msp130} \xrightarrow{\text{none}} \text{none}$	
722	mRNA_P_Msp130_translation_0	mRNA_P_Msp130_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Msp130}} \text{PROTEIN\_P\_Msp130}$	
723	mRNA_P_MspL_degradation_0	mRNA_P_MspL_degradation	$\text{mRNA\_P\_MspL} \xrightarrow{\text{none}} \text{none}$	
724	mRNA_P_MspL_translation_0	mRNA_P_MspL_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_MspL}} \text{PROTEIN\_P\_MspL}$	
725	mRNA_P_Not_degradation_0	mRNA_P_Not_degradation	$\text{mRNA\_P\_Not} \xrightarrow{\text{none}} \text{none}$	
726	mRNA_P_Not_translation_0	mRNA_P_Not_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Not}} \text{PROTEIN\_P\_Not}$	

Nº	Id	Name	Reaction Equation	SBO
727	mRNA_P_Nrl-_degradation_0	mRNA_P_Nrl_degradation	$\text{mRNA\_P\_Nrl} \xrightarrow{\text{none}} \text{none}$	
728	mRNA_P_Nrl-_translation_0	mRNA_P_Nrl_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Nrl}} \text{PROTEIN\_P\_Nrl}$	
729	mRNA_P_OrCt-_degradation_0	mRNA_P_OrCt_degradation	$\text{mRNA\_P\_OrCt} \xrightarrow{\text{none}} \text{none}$	
730	mRNA_P_OrCt-_translation_0	mRNA_P_OrCt_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_OrCt}} \text{PROTEIN\_P\_OrCt}$	
731	mRNA_P_Otx-_degradation_0	mRNA_P_Otx_degradation	$\text{mRNA\_P\_Otx} \xrightarrow{\text{none}} \text{none}$	
732	mRNA_P_Otx-_translation_0	mRNA_P_Otx_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Otx}} \text{PROTEIN\_P\_Otx}$	
733	mRNA_P_Pks-_degradation_0	mRNA_P_Pks_degradation	$\text{mRNA\_P\_Pks} \xrightarrow{\text{none}} \text{none}$	
734	mRNA_P_Pks-_translation_0	mRNA_P_Pks_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Pks}} \text{PROTEIN\_P\_Pks}$	
735	mRNA_P_Pmar1-_degradation_0	mRNA_P_Pmar1_degradation	$\text{mRNA\_P\_Pmar1} \xrightarrow{\text{none}} \text{none}$	
736	mRNA_P_Pmar1-_translation_0	mRNA_P_Pmar1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Pmar1}} \text{PROTEIN\_P\_Pmar1}$	
737	mRNA_P_Sm27-_degradation_0	mRNA_P_Sm27_degradation	$\text{mRNA\_P\_Sm27} \xrightarrow{\text{none}} \text{none}$	
738	mRNA_P_Sm27-_translation_0	mRNA_P_Sm27_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Sm27}} \text{PROTEIN\_P\_Sm27}$	

Nº	Id	Name	Reaction Equation	SBO
739	mRNA_P_Sm30-degradation_0	mRNA_P_Sm30_degradation	$\text{mRNA\_P\_Sm30} \xrightarrow{\text{none}} \text{none}$	
740	mRNA_P_Sm30-translation_0	mRNA_P_Sm30_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Sm30}} \text{PROTEIN\_P\_Sm30}$	
741	mRNA_P_Sm50-degradation_0	mRNA_P_Sm50_degradation	$\text{mRNA\_P\_Sm50} \xrightarrow{\text{none}} \text{none}$	
742	mRNA_P_Sm50-translation_0	mRNA_P_Sm50_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Sm50}} \text{PROTEIN\_P\_Sm50}$	
743	mRNA_P_Snail-degradation_0	mRNA_P_Snail_degradation	$\text{mRNA\_P\_Snail} \xrightarrow{\text{none}} \text{none}$	
744	mRNA_P_Snail-translation_0	mRNA_P_Snail_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Snail}} \text{PROTEIN\_P\_Snail}$	
745	mRNA_P_SoXB1-degradation_0	mRNA_P_SoXB1_degradation	$\text{mRNA\_P\_SoXB1} \xrightarrow{\text{none}} \text{none}$	
746	mRNA_P_SoXB1-translation_0	mRNA_P_SoXB1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_SoXB1}} \text{PROTEIN\_P\_SoXB1}$	
747	mRNA_P_SoXC-degradation_0	mRNA_P_SoXC_degradation	$\text{mRNA\_P\_SoXC} \xrightarrow{\text{none}} \text{none}$	
748	mRNA_P_SoXC-translation_0	mRNA_P_SoXC_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_SoXC}} \text{PROTEIN\_P\_SoXC}$	
749	mRNA_P_SuTx-degradation_0	mRNA_P_SuTx_degradation	$\text{mRNA\_P\_SuTx} \xrightarrow{\text{none}} \text{none}$	
750	mRNA_P_SuTx-translation_0	mRNA_P_SuTx_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_SuTx}} \text{PROTEIN\_P\_SuTx}$	

Nº	Id	Name	Reaction Equation	SBO
751	mRNA_P_TBr-degradation_0	mRNA_P_TBr_degradation	$\text{mRNA\_P\_TBr} \xrightarrow{\text{none}} \text{none}$	
752	mRNA_P_TBr-translation_0	mRNA_P_TBr_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_TBr}} \text{PROTEIN\_P\_TBr}$	
753	mRNA_P_Tel-degradation_0	mRNA_P_Tel_degradation	$\text{mRNA\_P\_Tel} \xrightarrow{\text{none}} \text{none}$	
754	mRNA_P_Tel-translation_0	mRNA_P_Tel_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Tel}} \text{PROTEIN\_P\_Tel}$	
755	mRNA_P_Tgif-degradation_0	mRNA_P_Tgif_degradation	$\text{mRNA\_P\_Tgif} \xrightarrow{\text{none}} \text{none}$	
756	mRNA_P_Tgif-translation_0	mRNA_P_Tgif_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Tgif}} \text{PROTEIN\_P\_Tgif}$	
757	mRNA_P_UbiqAlx1-degradation_0	mRNA_P_UbiqAlx1_degradation	$\text{mRNA\_P\_UbiqAlx1} \xrightarrow{\text{none}} \text{none}$	
758	mRNA_P_UbiqAlx1-translation_0	mRNA_P_UbiqAlx1_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_UbiqAlx1}} \text{PROTEIN\_P\_UbiqAlx1}$	
759	mRNA_P_UbiqES-degradation_0	mRNA_P_UbiqES_degradation	$\text{mRNA\_P\_UbiqES} \xrightarrow{\text{none}} \text{none}$	
760	mRNA_P_UbiqES-translation_0	mRNA_P_UbiqES_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_UbiqES}} \text{PROTEIN\_P\_UbiqES}$	
761	mRNA_P_UbiqEts1-degradation_0	mRNA_P_UbiqEts1_degradation	$\text{mRNA\_P\_UbiqEts1} \xrightarrow{\text{none}} \text{none}$	

Nº	Id	Name	Reaction Equation	SBO
762	mRNA_P-_UbiqEts1-_translation_0	mRNA_P_UbiqEts1_translation	none $\xrightarrow{\text{mRNA\_P\_UbiqEts1}}$ PROTEIN_P_UbiqEts1	
763	mRNA_P-_UbiqHesC-_degradation_0	mRNA_P_UbiqHesC_degradation	mRNA_P_UbiqHesC $\xrightarrow{\text{none}}$ none	
764	mRNA_P-_UbiqHesC-_translation_0	mRNA_P_UbiqHesC_translation	none $\xrightarrow{\text{mRNA\_P\_UbiqHesC}}$ PROTEIN_P_UbiqHesC	
765	mRNA_P-_UbiqHnf6-_degradation_0	mRNA_P_UbiqHnf6_degradation	mRNA_P_UbiqHnf6 $\xrightarrow{\text{none}}$ none	
766	mRNA_P-_UbiqHnf6-_translation_0	mRNA_P_UbiqHnf6_translation	none $\xrightarrow{\text{mRNA\_P\_UbiqHnf6}}$ PROTEIN_P_UbiqHnf6	
767	mRNA_P-_UbiqSoxC-_degradation_0	mRNA_P_UbiqSoxC_degradation	mRNA_P_UbiqSoxC $\xrightarrow{\text{none}}$ none	
768	mRNA_P-_UbiqSoxC-_translation_0	mRNA_P_UbiqSoxC_translation	none $\xrightarrow{\text{mRNA\_P\_UbiqSoxC}}$ PROTEIN_P_UbiqSoxC	
769	mRNA_P_UbiqTel-_degradation_0	mRNA_P_UbiqTel_degradation	mRNA_P_UbiqTel $\xrightarrow{\text{none}}$ none	
770	mRNA_P_UbiqTel-_translation_0	mRNA_P_UbiqTel_translation	none $\xrightarrow{\text{mRNA\_P\_UbiqTel}}$ PROTEIN_P_UbiqTel	

Nº	Id	Name	Reaction Equation	SBO
771	mRNA_P_VEGFR-_degradation_0	mRNA_P_VEGFR_degradation	$\text{mRNA\_P\_VEGFR} \longrightarrow \text{none}$	
772	mRNA_P_VEGFR-_translation_0	mRNA_P_VEGFR_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_VEGFR}} \text{PROTEIN\_P\_VEGFR}$	
773	mRNA_P_Wnt8-_degradation_0	mRNA_P_Wnt8_degradation	$\text{mRNA\_P\_Wnt8} \xrightarrow{\text{none}} \text{none}$	
774	mRNA_P_Wnt8-_translation_0	mRNA_P_Wnt8_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_Wnt8}} \text{PROTEIN\_P\_Wnt8}$	
775	mRNA_P_cB-_degradation_0	mRNA_P_cB_degradation	$\text{mRNA\_P\_cB} \xrightarrow{\text{none}} \text{none}$	
776	mRNA_P_cB-_translation_0	mRNA_P_cB_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_cB}} \text{PROTEIN\_P\_cB}$	
777	mRNA_P_z13-_degradation_0	mRNA_P_z13_degradation	$\text{mRNA\_P\_z13} \xrightarrow{\text{none}} \text{none}$	
778	mRNA_P_z13-_translation_0	mRNA_P_z13_translation	$\text{none} \xrightarrow{\text{mRNA\_P\_z13}} \text{PROTEIN\_P\_z13}$	

## 7.1 Reaction E\_Gcad\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_Gcad\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 6: Properties of each reactant.

Id	Name	SBO
PRE_E_Gcad	PRE_E_Gcad	

### Product

Table 7: Properties of each product.

Id	Name	SBO
mRNA_E_Gcad	mRNA_E_Gcad	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_1 = \frac{\text{E\_Gcad\_S1} \cdot \text{P\_Gcad\_HillK} \cdot \text{time}^{\text{P\_Gcad\_HillH}}}{\text{P\_Gcad\_theta1}^{\text{P\_Gcad\_HillH}} + \text{time}^{\text{P\_Gcad\_HillH}}} + \text{E\_Gcad\_S2} \cdot \text{P\_Gcad\_HillK} \cdot \left( 1 - \frac{\text{time}^{\text{P\_Gcad\_HillH}}}{\text{P\_Gcad\_theta2}^{\text{P\_Gcad\_HillH}} + \text{time}^{\text{P\_Gcad\_HillH}}} \right) \quad (114)$$

Table 8: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Gcad_HillH			8.0		<input checked="" type="checkbox"/>
P_Gcad_HillK			10.0		<input checked="" type="checkbox"/>
P_Gcad_theta1			1.0		<input checked="" type="checkbox"/>
P_Gcad_theta2			11.0		<input checked="" type="checkbox"/>

## 7.2 Reaction E\_Notch\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_Notch\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 9: Properties of each reactant.

Id	Name	SBO
PRE_E_Notch	PRE_E_Notch	

### Product

Table 10: Properties of each product.

Id	Name	SBO
mRNA_E_Notch	mRNA_E_Notch	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_2 = \frac{E_{\text{Notch}} \cdot S1 \cdot P_{\text{Notch\_HillK}} \cdot \text{time}^{P_{\text{Notch\_HillH}}}}{P_{\text{Notch\_theta1}}^{P_{\text{Notch\_HillH}}} + \text{time}^{P_{\text{Notch\_HillH}}}} + E_{\text{Notch}} \cdot S2 \cdot P_{\text{Notch\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{Notch\_HillH}}}}{P_{\text{Notch\_theta2}}^{P_{\text{Notch\_HillH}}} + \text{time}^{P_{\text{Notch\_HillH}}}} \right) \quad (116)$$

Table 11: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Notch-HillH			8.0		<input checked="" type="checkbox"/>
P_Notch-HillK			10.0		<input checked="" type="checkbox"/>
P_Notch-theta1			21.0		<input checked="" type="checkbox"/>

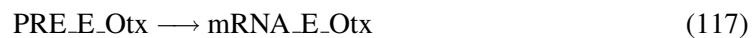
Id	Name	SBO	Value	Unit	Constant
P_Notch-_theta2			30.0		<input checked="" type="checkbox"/>

### 7.3 Reaction E\_Otx\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_Otx\_Hill\_Kinetic

#### Reaction equation



#### Reactant

Table 12: Properties of each reactant.

Id	Name	SBO
PRE_E_Otx	PRE_E_Otx	

#### Product

Table 13: Properties of each product.

Id	Name	SBO
mRNA_E_Otx	mRNA_E_Otx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_3 = \frac{\text{E\_Otx\_S1} \cdot \text{P\_Otx\_HillK} \cdot \text{time}^{\text{P\_Otx\_HillH}}}{\text{P\_Otx\_theta1}^{\text{P\_Otx\_HillH}} + \text{time}^{\text{P\_Otx\_HillH}}} + \text{E\_Otx\_S2} \cdot \text{P\_Otx\_HillK} \cdot \left( 1 - \frac{\text{time}^{\text{P\_Otx\_HillH}}}{\text{P\_Otx\_theta2}^{\text{P\_Otx\_HillH}} + \text{time}^{\text{P\_Otx\_HillH}}} \right) \quad (118)$$

Table 14: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Otx_HillK			10.0		<input checked="" type="checkbox"/>
P_Otx_HillH			8.0		<input checked="" type="checkbox"/>
P_Otx_theta1			1.0		<input checked="" type="checkbox"/>
P_Otx_theta2			11.0		<input checked="" type="checkbox"/>

## 7.4 Reaction E\_SoxB1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_SoxB1\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 15: Properties of each reactant.

Id	Name	SBO
PRE_E_SoxB1	PRE_E_SoxB1	

**Product**

Table 16: Properties of each product.

Id	Name	SBO
mRNA_E_SoxB1	mRNA_E_SoxB1	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_4 = \frac{\text{E\_SoxB1\_S1} \cdot \text{P\_SoxB1\_HillK} \cdot \text{time}^{\text{P\_SoxB1\_HillH}}}{\text{P\_SoxB1\_theta1}^{\text{P\_SoxB1\_HillH}} + \text{time}^{\text{P\_SoxB1\_HillH}}} + \text{E\_SoxB1\_S2} \\ \cdot \text{P\_SoxB1\_HillK} \cdot \left( 1 - \frac{\text{time}^{\text{P\_SoxB1\_HillH}}}{\text{P\_SoxB1\_theta2}^{\text{P\_SoxB1\_HillH}} + \text{time}^{\text{P\_SoxB1\_HillH}}} \right) \quad (120)$$

Table 17: Properties of each parameter.

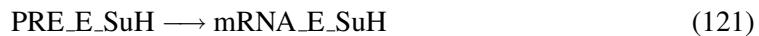
Id	Name	SBO	Value	Unit	Constant
P_SoxB1-_theta1			1.0		<input checked="" type="checkbox"/>
P_SoxB1-_theta2			14.0		<input checked="" type="checkbox"/>
P_SoxB1-_HillK			10.0		<input checked="" type="checkbox"/>
P_SoxB1-_HillH			8.0		<input checked="" type="checkbox"/>

## 7.5 Reaction E\_SuH\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_SuH\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 18: Properties of each reactant.

Id	Name	SBO
PRE_E_SuH	PRE_E_SuH	

### Product

Table 19: Properties of each product.

Id	Name	SBO
mRNA_E_SuH	mRNA_E_SuH	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_5 = \frac{E_{SuH\_S1} \cdot P_{SuH\_HillK} \cdot time^{P_{SuH\_HillH}}}{P_{SuH\_theta1}^{P_{SuH\_HillH}} + time^{P_{SuH\_HillH}}} + E_{SuH\_S2} \\ \cdot P_{SuH\_HillK} \cdot \left( 1 - \frac{time^{P_{SuH\_HillH}}}{P_{SuH\_theta2}^{P_{SuH\_HillH}} + time^{P_{SuH\_HillH}}} \right) \quad (122)$$

Table 20: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_SuH_HillH			8.0		<input checked="" type="checkbox"/>
P_SuH_HillK			10.0		<input checked="" type="checkbox"/>
P_SuH_theta1			24.0		<input checked="" type="checkbox"/>
P_SuH_theta2			30.0		<input checked="" type="checkbox"/>

## 7.6 Reaction E\_UMR\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_UMR\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 21: Properties of each reactant.

Id	Name	SBO
PRE_E_UMR	PRE_E_UMR	

**Product**

Table 22: Properties of each product.

Id	Name	SBO
mRNA_E_UMR	mRNA_E_UMR	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_6 = \frac{E\_UMR\_S1 \cdot P\_UMR\_HillK \cdot \text{time}^{P\_UMR\_HillH}}{P\_UMR\_theta1^{P\_UMR\_HillH} + \text{time}^{P\_UMR\_HillH}} + E\_UMR\_S2 \\ \cdot P\_UMR\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_UMR\_HillH}}{P\_UMR\_theta2^{P\_UMR\_HillH} + \text{time}^{P\_UMR\_HillH}} \right) \quad (124)$$

Table 23: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P\_UMR\_HillH			8.0		<input checked="" type="checkbox"/>
P\_UMR\_HillK			10.0		<input checked="" type="checkbox"/>
P\_UMR\_theta1			15.0		<input checked="" type="checkbox"/>
P\_UMR\_theta2			30.0		<input checked="" type="checkbox"/>

## 7.7 Reaction E\_UVA0tx\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_UVA0tx\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 24: Properties of each reactant.

Id	Name	SBO
PRE_E_UVA0tx	PRE_E_UVA0tx	

**Product**

Table 25: Properties of each product.

Id	Name	SBO
mRNA_E_UVA0tx	mRNA_E_UVA0tx	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_7 = \frac{E_{UVAOutx\_S1} \cdot P_{UVAOutx\_HillK} \cdot \text{time}^{P_{UVAOutx\_HillH}}}{P_{UVAOutx\_theta1}^{P_{UVAOutx\_HillH}} + \text{time}^{P_{UVAOutx\_HillH}}} + E_{UVAOutx\_S2} \\ \cdot P_{UVAOutx\_HillK} \cdot \left( 1 - \frac{\text{time}^{P_{UVAOutx\_HillH}}}{P_{UVAOutx\_theta2}^{P_{UVAOutx\_HillH}} + \text{time}^{P_{UVAOutx\_HillH}}} \right) \quad (126)$$

Table 26: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UVAOutx-_theta2			30.0		<input checked="" type="checkbox"/>
P_UVAOutx-_theta1			18.0		<input checked="" type="checkbox"/>
P_UVAOutx-_HillK			10.0		<input checked="" type="checkbox"/>
P_UVAOutx-_HillH			8.0		<input checked="" type="checkbox"/>

## 7.8 Reaction E\_UbiqSoxB1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_UbiqSoxB1\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 27: Properties of each reactant.

Id	Name	SBO
PRE_E_UbiqSoxB1	PRE_E_UbiqSoxB1	

**Product**

Table 28: Properties of each product.

Id	Name	SBO
mRNA_E_UbiqSoxB1	mRNA_E_UbiqSoxB1	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_8 = \frac{E_{\text{UbiqSoxB1\_S1}} \cdot P_{\text{UbiqSoxB1\_HillK}} \cdot \text{time}^{P_{\text{UbiqSoxB1\_HillH}}}}{P_{\text{UbiqSoxB1\_theta1}}^{P_{\text{UbiqSoxB1\_HillH}}} + \text{time}^{P_{\text{UbiqSoxB1\_HillH}}}} + E_{\text{UbiqSoxB1\_S2}} \\ \cdot P_{\text{UbiqSoxB1\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{UbiqSoxB1\_HillH}}}}{P_{\text{UbiqSoxB1\_theta2}}^{P_{\text{UbiqSoxB1\_HillH}}} + \text{time}^{P_{\text{UbiqSoxB1\_HillH}}}} \right) \quad (128)$$

Table 29: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqSoxB1_- _theta2			17.0		<input checked="" type="checkbox"/>
P_UbiqSoxB1_- _theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqSoxB1_- _HillK			10.0		<input checked="" type="checkbox"/>
P_UbiqSoxB1_- _HillH			8.0		<input checked="" type="checkbox"/>

## 7.9 Reaction E\_VEGF\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_VEGF\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 30: Properties of each reactant.

Id	Name	SBO
PRE_E_VEGF	PRE_E_VEGF	

### Product

Table 31: Properties of each product.

Id	Name	SBO
mRNA_E_VEGF	mRNA_E_VEGF	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_9 = \frac{E\_VEGF\_S1 \cdot P\_VEGF\_HillK \cdot time^{P\_VEGF\_HillH}}{P\_VEGF\_theta1^{P\_VEGF\_HillH} + time^{P\_VEGF\_HillH}} + E\_VEGF\_S2 \cdot P\_VEGF\_HillK \cdot \left( 1 - \frac{time^{P\_VEGF\_HillH}}{P\_VEGF\_theta2^{P\_VEGF\_HillH} + time^{P\_VEGF\_HillH}} \right) \quad (130)$$

Table 32: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_VEGF-_theta2			30.0		<input checked="" type="checkbox"/>
P_VEGF-_theta1			24.0		<input checked="" type="checkbox"/>
P_VEGF_HillH			8.0		<input checked="" type="checkbox"/>
P_VEGF_HillK			10.0		<input checked="" type="checkbox"/>

### 7.10 Reaction E\_cB\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** E\_cB\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 33: Properties of each reactant.

Id	Name	SBO
PRE_E_cB	PRE_E_cB	

## Product

Table 34: Properties of each product.

Id	Name	SBO
mRNA_E_cB	mRNA_E_cB	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{10} = \frac{E\_cB\_S1 \cdot P\_cB\_HillK \cdot time^{P\_cB\_HillH}}{P\_cB\_theta1^{P\_cB\_HillH} + time^{P\_cB\_HillH}} + E\_cB\_S2 \cdot P\_cB\_HillK \cdot \left( 1 - \frac{time^{P\_cB\_HillH}}{P\_cB\_theta2^{P\_cB\_HillH} + time^{P\_cB\_HillH}} \right) \quad (132)$$

Table 35: Properties of each parameter.

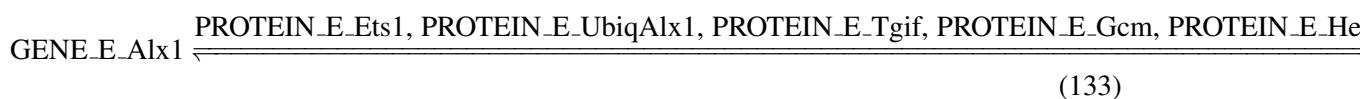
Id	Name	SBO	Value	Unit	Constant
P_cB_theta1			1.0		<input checked="" type="checkbox"/>
P_cB_theta2			11.0		<input checked="" type="checkbox"/>
P_cB_HillH			8.0		<input checked="" type="checkbox"/>
P_cB_HillK			10.0		<input checked="" type="checkbox"/>

## 7.11 Reaction GENE\_E\_Alx1\_transcription\_0

This is a reversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_E\_Alx1\_transcription

### Reaction equation



## Reactant

Table 36: Properties of each reactant.

Id	Name	SBO
GENE_E_Alx1	GENE_E_Alx1	

## Modifiers

Table 37: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_UbiqAlx1	PROTEIN_E_UbiqAlx1	
PROTEIN_E_Tgif	PROTEIN_E_Tgif	
PROTEIN_E_Gcm	PROTEIN_E_Gcm	
PROTEIN_E_HesC	PROTEIN_E_HesC	

## Product

Table 38: Properties of each product.

Id	Name	SBO
mRNA_E_Alx1	mRNA_E_Alx1	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{11} = & \left( \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_UbiqAlx1}} \cdot [\text{PROTEIN\_E\_UbiqAlx1}]}{c_{\text{PROTEIN\_UbiqAlx1}} + [\text{PROTEIN\_E\_UbiqAlx1}]} \\
 & \left. + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_E\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_E\_Tgif}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_Gcm}} \cdot c_{\text{PROTEIN\_Gcm}}}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_E\_Gcm}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]}
 \end{aligned} \tag{134}$$

Table 39: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UbiqAlx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqAlx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

## 7.12 Reaction GENE\_E\_Apobec\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Apobec\_transcription

### Reaction equation



### Reactant

Table 40: Properties of each reactant.

Id	Name	SBO
GENE_E_Apobec	GENE_E_Apobec	

### Modifiers

Table 41: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_E_Hox	PROTEIN_E_Hox	

## Product

Table 42: Properties of each product.

Id	Name	SBO
mRNA_E_Apobec	mRNA_E_Apobec	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{12} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_E\_Hox}]} \quad (136)$$

Table 43: Properties of each parameter.

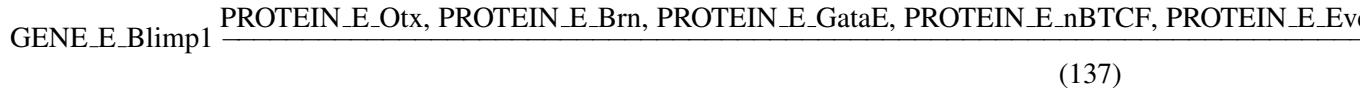
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>

## 7.13 Reaction GENE\_E\_Blimp1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_E\_Blimp1\_transcription

## Reaction equation



## Reactant

Table 44: Properties of each reactant.

Id	Name	SBO
GENE_E_Blimp1	GENE_E_Blimp1	

## Modifiers

Table 45: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_Brn	PROTEIN_E_Brn	
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_nBTF	PROTEIN_E_nBTF	
PROTEIN_E_Eve	PROTEIN_E_Eve	
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	

## Product

Table 46: Properties of each product.

Id	Name	SBO
mRNA_E_Blimp1	mRNA_E_Blimp1	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{13} = & \left( \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} + \frac{k_{\text{PROTEIN\_Brn}} \cdot [\text{PROTEIN\_E\_Brn}]}{c_{\text{PROTEIN\_Brn}} + [\text{PROTEIN\_E\_Brn}]} \right. \\
& + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \\
& + \frac{k_{\text{PROTEIN\_nBTF}} \cdot [\text{PROTEIN\_E\_nBTF}]}{c_{\text{PROTEIN\_nBTF}} + [\text{PROTEIN\_E\_nBTF}]} \\
& \left. + \frac{k_{\text{PROTEIN\_Eve}} \cdot [\text{PROTEIN\_E\_Eve}]}{c_{\text{PROTEIN\_Eve}} + [\text{PROTEIN\_E\_Eve}]} \right) \\
& \cdot \frac{k_{\text{PROTEIN\_Blimp1}} \cdot c_{\text{PROTEIN\_Blimp1}}}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_E\_Blimp1}]} \\
& \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_E\_GroTCF}]}
\end{aligned} \tag{138}$$

Table 47: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Brn			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Brn			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-GataE			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.14 Reaction GENE\_E\_Bra\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_Bra\_transcription

### Reaction equation



### Reactant

Table 48: Properties of each reactant.

Id	Name	SBO
GENE_E_Bra	GENE_E_Bra	

### Modifiers

Table 49: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_nBTcf	PROTEIN_E_nBTcf	
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_GroTCf	PROTEIN_E_GroTCf	

### Product

Table 50: Properties of each product.

Id	Name	SBO
mRNA_E_Bra	mRNA_E_Bra	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{14} = \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} + \frac{k_{\text{PROTEIN\_nBTcf}} \cdot [\text{PROTEIN\_E\_nBTcf}]}{c_{\text{PROTEIN\_nBTcf}} + [\text{PROTEIN\_E\_nBTcf}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} \right) \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_E\_GroTCF}]} \quad (140)$$

Table 51: Properties of each parameter.

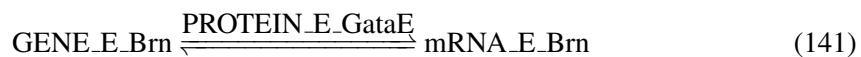
Id	Name	SBO	Value	Unit	Constant
<code>k_PROTEIN-GroTCF</code>	1.0				
<code>c_PROTEIN-GroTCF</code>	1.0				
<code>k_PROTEIN-Otx</code>	1.0				
<code>c_PROTEIN-Otx</code>	1.0				
<code>k_PROTEIN-GataE</code>	1.0				
<code>c_PROTEIN-GataE</code>	1.0				
<code>k_PROTEIN-nBTcf</code>	1.0				
<code>c_PROTEIN-nBTcf</code>	1.0				

## 7.15 Reaction GENE\_E\_Brn\_transcription\_0

This is a reversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Brn\_transcription

### Reaction equation



## Reactant

Table 52: Properties of each reactant.

Id	Name	SBO
GENE_E_Brn	GENE_E_Brn	

## Modifier

Table 53: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	

## Product

Table 54: Properties of each product.

Id	Name	SBO
mRNA_E_Brn	mRNA_E_Brn	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{15} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \quad (142)$$

Table 55: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					

## 7.16 Reaction GENE\_E\_CyP\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_CyP\_transcription

### Reaction equation



### Reactant

Table 56: Properties of each reactant.

Id	Name	SBO
GENE_E_CyP	GENE_E_CyP	

### Modifiers

Table 57: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Dri	PROTEIN_E_Dri	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_SoxB1	PROTEIN_E_SoxB1	

### Product

Table 58: Properties of each product.

Id	Name	SBO
mRNA_E_CyP	mRNA_E_CyP	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{16} = \left( \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_E\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_E\_Dri}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_SoxB1}} \cdot c_{\text{PROTEIN\_SoxB1}}}{c_{\text{PROTEIN\_SoxB1}} + [\text{PROTEIN\_E\_SoxB1}]} \quad (144)$$

Table 59: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SoxB1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>

### 7.17 Reaction GENE\_E\_Delta\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_Delta\_transcription

#### Reaction equation



#### Reactant

Table 60: Properties of each reactant.

Id	Name	SBO
GENE_E_Delta	GENE_E_Delta	

#### Modifiers

Table 61: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqDelta	PROTEIN_E_UbiqDelta	
PROTEIN_E_UMADelta	PROTEIN_E_UMADelta	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	

Id	Name	SBO
PROTEIN_E_HesC	PROTEIN_E_HesC	

## Product

Table 62: Properties of each product.

Id	Name	SBO
mRNA_E_Delta	mRNA_E_Delta	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{17} = \left( \frac{k_{\text{PROTEIN\_UbiqDelta}} \cdot [\text{PROTEIN\_E\_UbiqDelta}]}{c_{\text{PROTEIN\_UbiqDelta}} + [\text{PROTEIN\_E\_UbiqDelta}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_UMADelta}} \cdot [\text{PROTEIN\_E\_UMADelta}]}{c_{\text{PROTEIN\_UMADelta}} + [\text{PROTEIN\_E\_UMADelta}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \right) \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]} \quad (146)$$

Table 63: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqDelta			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqDelta			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UMADelta			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UMADelta			1.0		<input checked="" type="checkbox"/>

## 7.18 Reaction GENE\_E\_Dpt\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Dpt\_transcription

**Reaction equation**



**Reactant**

Table 64: Properties of each reactant.

Id	Name	SBO
GENE_E_Dpt	GENE_E_Dpt	

**Modifier**

Table 65: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Gcm	PROTEIN_E_Gcm	

**Product**

Table 66: Properties of each product.

Id	Name	SBO
mRNA_E_Dpt	mRNA_E_Dpt	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{18} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_E\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_E\_Gcm}]} \quad (148)$$

Table 67: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

## 7.19 Reaction GENE\_E\_Dri\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Dri\_transcription

### Reaction equation



### Reactant

Table 68: Properties of each reactant.

Id	Name	SBO
GENE_E_Dri	GENE_E_Dri	

### Modifiers

Table 69: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	

### Product

Table 70: Properties of each product.

Id	Name	SBO
mRNA_E_Dri	mRNA_E_Dri	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{19} = \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \quad (150)$$

Table 71: Properties of each parameter.

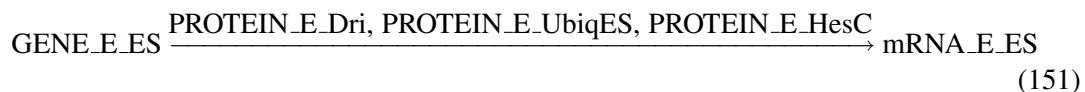
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					

## 7.20 Reaction GENE\_E\_ES\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_ES\_transcription

### Reaction equation



### Reactant

Table 72: Properties of each reactant.

Id	Name	SBO
GENE_E_ES	GENE_E_ES	

### Modifiers

Table 73: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Dri	PROTEIN_E_Dri	
PROTEIN_E_UbiqES	PROTEIN_E_UbiqES	
PROTEIN_E_HesC	PROTEIN_E_HesC	

## Product

Table 74: Properties of each product.

Id	Name	SBO
mRNA_E_ES	mRNA_E_ES	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{20} = \left( \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_E\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_E\_Dri}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_UbiqES}} \cdot [\text{PROTEIN\_E\_UbiqES}]}{c_{\text{PROTEIN\_UbiqES}} + [\text{PROTEIN\_E\_UbiqES}]} \right) \quad (152) \\ \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]}$$

Table 75: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UbiqES			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqES			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>

## 7.21 Reaction GENE\_E\_Endo16\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Endo16\_transcription

**Reaction equation**



**Reactant**

Table 76: Properties of each reactant.

Id	Name	SBO
GENE_E_Endo16	GENE_E_Endo16	

**Modifiers**

Table 77: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_Brn	PROTEIN_E_Brn	

**Product**

Table 78: Properties of each product.

Id	Name	SBO
mRNA_E_Endo16	mRNA_E_Endo16	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{21} = \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} + \frac{k_{\text{PROTEIN\_Brn}} \cdot [\text{PROTEIN\_E\_Brn}]}{c_{\text{PROTEIN\_Brn}} + [\text{PROTEIN\_E\_Brn}]} \quad (154)$$

Table 79: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>

## 7.22 Reaction GENE\_E\_Erg\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_Erg\_transcription

### Reaction equation



### Reactant

Table 80: Properties of each reactant.

Id	Name	SBO
GENE_E_Erg	GENE_E_Erg	

### Modifiers

Table 81: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_TBr	PROTEIN_E_TBr	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Hex	PROTEIN_E_Hex	

### Product

Table 82: Properties of each product.

Id	Name	SBO
mRNA_E_Erg	mRNA_E_Erg	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{22} = \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_E\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_E\_TBr}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} \quad (156)$$

Table 83: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_TBr					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_TBr					

### 7.23 Reaction GENE\_E\_Ets1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Ets1\_transcription

#### Reaction equation



## Reactant

Table 84: Properties of each reactant.

Id	Name	SBO
GENE_E_Ets1	GENE_E_Ets1	

## Modifiers

Table 85: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqEts1	PROTEIN_E_UbiqEts1	
PROTEIN_E_HesC	PROTEIN_E_HesC	

## Product

Table 86: Properties of each product.

Id	Name	SBO
mRNA_E_Ets1	mRNA_E_Ets1	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{23} = \frac{k_{\text{PROTEIN\_UbiqEts1}} \cdot [\text{PROTEIN\_E\_UbiqEts1}]}{c_{\text{PROTEIN\_UbiqEts1}} + [\text{PROTEIN\_E\_UbiqEts1}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]} \quad (158)$$

Table 87: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqEts1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqEts1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-HesC			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>

## 7.24 Reaction GENE\_E\_Eve\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_Eve\_transcription

### Reaction equation



### Reactant

Table 88: Properties of each reactant.

Id	Name	SBO
GENE_E_Eve	GENE_E_Eve	

### Modifiers

Table 89: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	
PROTEIN_E_nBTcf	PROTEIN_E_nBTcf	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	
PROTEIN_E_Hox	PROTEIN_E_Hox	

### Product

Table 90: Properties of each product.

Id	Name	SBO
mRNA_E_Eve	mRNA_E_Eve	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{24} = \left( \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_E\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_E\_Blimp1}]} + \frac{k_{\text{PROTEIN\_nTCF}} \cdot [\text{PROTEIN\_E\_nTCF}]}{c_{\text{PROTEIN\_nTCF}} + [\text{PROTEIN\_E\_nTCF}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_E\_GroTCF}]} \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_E\_Hox}]} \quad (160)$$

Table 91: Properties of each parameter.

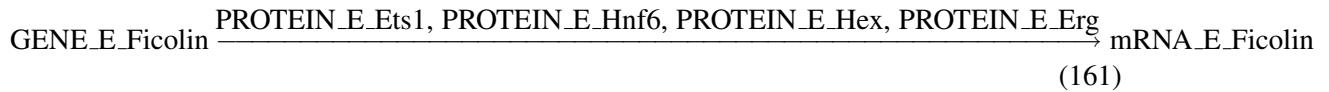
Id	Name	SBO	Value	Unit	Constant
<code>k_PROTEIN-GroTCF</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-GroTCF</code>			1.0		<input checked="" type="checkbox"/>
<code>k_PROTEIN-Blimp1</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-Blimp1</code>			1.0		<input checked="" type="checkbox"/>
<code>k_PROTEIN-nTCF</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-nTCF</code>			1.0		<input checked="" type="checkbox"/>
<code>k_PROTEIN-Hox</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-Hox</code>			1.0		<input checked="" type="checkbox"/>

## 7.25 Reaction GENE\_E\_Ficolin\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_Ficolin\_transcription

## Reaction equation



## Reactant

Table 92: Properties of each reactant.

Id	Name	SBO
GENE_E_Ficolin	GENE_E_Ficolin	

## Modifiers

Table 93: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	
PROTEIN_E_Hex	PROTEIN_E_Hex	
PROTEIN_E_Erg	PROTEIN_E_Erg	

## Product

Table 94: Properties of each product.

Id	Name	SBO
mRNA_E_Ficolin	mRNA_E_Ficolin	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{25} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_E\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_E\_Hnf6}]} \\ + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \quad (162)$$

Table 95: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.26 Reaction GENE\_E\_FoxA\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_E\_FoxA\_transcription

### Reaction equation



### Reactant

Table 96: Properties of each reactant.

Id	Name	SBO
GENE_E_FoxA	GENE_E_FoxA	

### Modifiers

Table 97: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_nBTF	PROTEIN_E_nBTF	
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_E_Tgif	PROTEIN_E_Tgif	
PROTEIN_E_GroTFC	PROTEIN_E_GroTFC	
PROTEIN_E_FoxA	PROTEIN_E_FoxA	

## Product

Table 98: Properties of each product.

Id	Name	SBO
mRNA_E_FoxA	mRNA_E_FoxA	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{26} = & \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_nBTF}} \cdot [\text{PROTEIN\_E\_nBTF}]}{c_{\text{PROTEIN\_nBTF}} + [\text{PROTEIN\_E\_nBTF}]} \\
 & + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \\
 & \left. + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_E\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_E\_Tgif}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_GroTFC}} \cdot c_{\text{PROTEIN\_GroTFC}}}{c_{\text{PROTEIN\_GroTFC}} + [\text{PROTEIN\_E\_GroTFC}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_FoxA}} \cdot c_{\text{PROTEIN\_FoxA}}}{c_{\text{PROTEIN\_FoxA}} + [\text{PROTEIN\_E\_FoxA}]}
 \end{aligned} \tag{164}$$

Table 99: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTFC			1.0		<input checked="" type="checkbox"/>

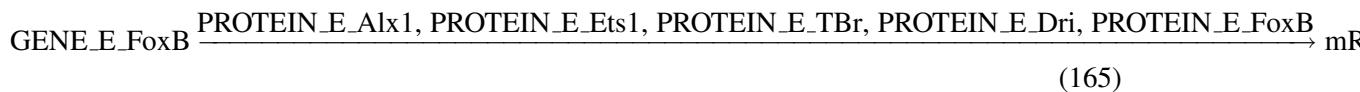
Id	Name	SBO	Value	Unit	Constant
	c_PROTEIN-_GroTFC		1.0		<input checked="" type="checkbox"/>
	k_PROTEIN-_FoxA		1.0		<input checked="" type="checkbox"/>
	c_PROTEIN-_FoxA		1.0		<input checked="" type="checkbox"/>
	k_PROTEIN-_nBTF		1.0		<input checked="" type="checkbox"/>
	c_PROTEIN-_nBTF		1.0		<input checked="" type="checkbox"/>
	k_PROTEIN-_Tgff		1.0		<input checked="" type="checkbox"/>
	c_PROTEIN-_Tgff		1.0		<input checked="" type="checkbox"/>
	k_PROTEIN-_Bra		1.0		<input checked="" type="checkbox"/>
	c_PROTEIN-_Bra		1.0		<input checked="" type="checkbox"/>
	k_PROTEIN-_Otx		1.0		<input checked="" type="checkbox"/>
	c_PROTEIN-_Otx		1.0		<input checked="" type="checkbox"/>
	k_PROTEIN-_GataE		1.0		<input checked="" type="checkbox"/>
	c_PROTEIN-_GataE		1.0		<input checked="" type="checkbox"/>

## 7.27 Reaction GENE\_E\_FoxB\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_E\_FoxB\_transcription

### Reaction equation



### Reactant

Table 100: Properties of each reactant.

Id	Name	SBO
GENE_E_FoxB	GENE_E_FoxB	

## Modifiers

Table 101: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_TBr	PROTEIN_E_TBr	
PROTEIN_E_Dri	PROTEIN_E_Dri	
PROTEIN_E_FoxB	PROTEIN_E_FoxB	

## Product

Table 102: Properties of each product.

Id	Name	SBO
mRNA_E_FoxB	mRNA_E_FoxB	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{27} = \left( \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_E\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_E\_TBr}]} + \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_E\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_E\_Dri}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_FoxB}} \cdot c_{\text{PROTEIN\_FoxB}}}{c_{\text{PROTEIN\_FoxB}} + [\text{PROTEIN\_E\_FoxB}]} \quad (166)$$

Table 103: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Ets1	1.0	<input checked="" type="checkbox"/>			
k_PROTEIN-_Dri	1.0	<input checked="" type="checkbox"/>			
c_PROTEIN-_Dri	1.0	<input checked="" type="checkbox"/>			
k_PROTEIN-_TBr	1.0	<input checked="" type="checkbox"/>			
c_PROTEIN-_TBr	1.0	<input checked="" type="checkbox"/>			
k_PROTEIN-_FoxB	1.0	<input checked="" type="checkbox"/>			
c_PROTEIN-_FoxB	1.0	<input checked="" type="checkbox"/>			
k_PROTEIN-_Alx1	1.0	<input checked="" type="checkbox"/>			
c_PROTEIN-_Alx1	1.0	<input checked="" type="checkbox"/>			

## 7.28 Reaction GENE\_E\_FoxN23\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_FoxN23\_transcription

**Reaction equation**



**Reactant**

Table 104: Properties of each reactant.

Id	Name	SBO
GENE_E_FoxN23	GENE_E_FoxN23	

**Modifier**

Table 105: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_nBTcf	PROTEIN_E_nBTcf	

## Product

Table 106: Properties of each product.

Id	Name	SBO
mRNA_E_FoxN23	mRNA_E_FoxN23	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{28} = \frac{k_{\text{PROTEIN\_nBTcf}} \cdot [\text{PROTEIN\_E\_nBTcf}]}{c_{\text{PROTEIN\_nBTcf}} + [\text{PROTEIN\_E\_nBTcf}]} \quad (168)$$

Table 107: Properties of each parameter.

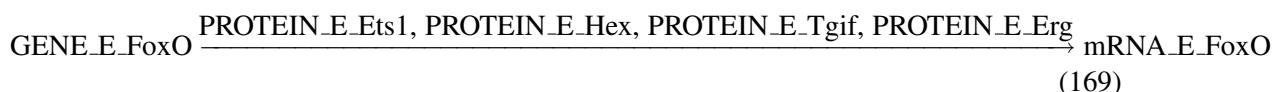
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-nBTcf			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTcf			1.0		<input checked="" type="checkbox"/>

## 7.29 Reaction GENE\_E\_FoxO\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_FoxO\_transcription

### Reaction equation



## Reactant

Table 108: Properties of each reactant.

Id	Name	SBO
GENE_E_FoxO	GENE_E_FoxO	

## Modifiers

Table 109: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Hex	PROTEIN_E_Hex	
PROTEIN_E_Tgif	PROTEIN_E_Tgif	
PROTEIN_E_Erg	PROTEIN_E_Erg	

## Product

Table 110: Properties of each product.

Id	Name	SBO
mRNA_E_FoxO	mRNA_E_FoxO	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{29} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} \\ + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_E\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_E\_Tgif}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \quad (170)$$

Table 111: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-Hex	1.0	<input checked="" type="checkbox"/>			
k_PROTEIN-Erg	1.0	<input checked="" type="checkbox"/>			
c_PROTEIN-Erg	1.0	<input checked="" type="checkbox"/>			
k_PROTEIN-Tgif	1.0	<input checked="" type="checkbox"/>			
c_PROTEIN-Tgif	1.0	<input checked="" type="checkbox"/>			

### 7.30 Reaction GENE\_E\_FvMo\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_FvMo\_transcription

**Reaction equation**



**Reactant**

Table 112: Properties of each reactant.

Id	Name	SBO
GENE_E_FvMo	GENE_E_FvMo	

**Modifiers**

Table 113: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Gcm	PROTEIN_E_Gcm	
PROTEIN_E_GataE	PROTEIN_E_GataE	

**Product**

Table 114: Properties of each product.

Id	Name	SBO
mRNA_E_FvMo	mRNA_E_FvMo	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{30} = \frac{k_{PROTEIN\_Gcm} \cdot [PROTEIN\_E\_Gcm]}{c_{PROTEIN\_Gcm} + [PROTEIN\_E\_Gcm]} + \frac{k_{PROTEIN\_GataE} \cdot [PROTEIN\_E\_GataE]}{c_{PROTEIN\_GataE} + [PROTEIN\_E\_GataE]} \quad (172)$$

Table 115: Properties of each parameter.

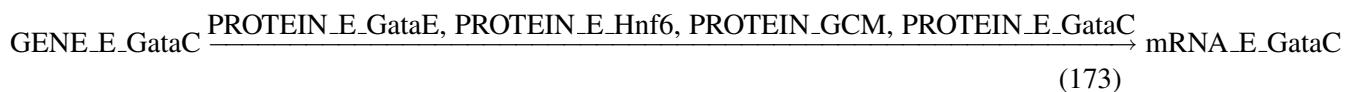
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					

### 7.31 Reaction GENE\_E\_GataC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_GataC\_transcription

#### Reaction equation



#### Reactant

Table 116: Properties of each reactant.

Id	Name	SBO
GENE_E_GataC	GENE_E_GataC	

Id	Name	SBO
----	------	-----

## Modifiers

Table 117: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	
PROTEIN_GCM	PROTEIN_GCM	
PROTEIN_E_GataC	PROTEIN_E_GataC	

## Product

Table 118: Properties of each product.

Id	Name	SBO
mRNA_E_GataC	mRNA_E_GataC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{31} = \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_E\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_E\_Hnf6}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_GCM}} \cdot [\text{PROTEIN\_GCM}]}{c_{\text{PROTEIN\_GCM}} + [\text{PROTEIN\_GCM}]} \right) \cdot \frac{k_{\text{PROTEIN\_GataC}} \cdot c_{\text{PROTEIN\_GataC}}}{c_{\text{PROTEIN\_GataC}} + [\text{PROTEIN\_E\_GataC}]} \quad (174)$$

Table 119: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GataC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GataC			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GCM			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GCM			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.32 Reaction GENE\_E\_GataE\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_GataE\_transcription

#### Reaction equation



#### Reactant

Table 120: Properties of each reactant.

Id	Name	SBO
GENE_E_GataE	GENE_E_GataE	

#### Modifiers

Table 121: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_SuHN	PROTEIN_E_SuHN	
PROTEIN_E_Hox	PROTEIN_E_Hox	

## Product

Table 122: Properties of each product.

Id	Name	SBO
mRNA_E_GataE	mRNA_E_GataE	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{32} = \left( \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_SuHN}} \cdot [\text{PROTEIN\_E\_SuHN}]}{c_{\text{PROTEIN\_SuHN}} + [\text{PROTEIN\_E\_SuHN}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_E\_Hox}]} \quad (176)$$

Table 123: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>

## 7.33 Reaction GENE\_E\_Gcad\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Gcad\_transcription

## Reaction equation



## Reactant

Table 124: Properties of each reactant.

Id	Name	SBO
GENE_E_Gcad	GENE_E_Gcad	

## Modifiers

Table 125: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqGcad	PROTEIN_E_UbiqGcad	
PROTEIN_E_Snail	PROTEIN_E_Snail	

## Product

Table 126: Properties of each product.

Id	Name	SBO
mRNA_E_Gcad	mRNA_E_Gcad	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{33} = \frac{k_{\text{PROTEIN\_UbiqGcad}} \cdot [\text{PROTEIN\_E\_UbiqGcad}]}{c_{\text{PROTEIN\_UbiqGcad}} + [\text{PROTEIN\_E\_UbiqGcad}]} \cdot \frac{k_{\text{PROTEIN\_Snail}} \cdot c_{\text{PROTEIN\_Snail}}}{c_{\text{PROTEIN\_Snail}} + [\text{PROTEIN\_E\_Snail}]} \quad (178)$$

Table 127: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Snail			1.0		<input checked="" type="checkbox"/>

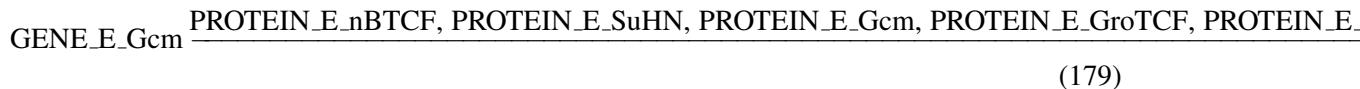
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Snail			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqGcad			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqGcad			1.0		<input checked="" type="checkbox"/>

### 7.34 Reaction GENE\_E\_Gcm\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by six modifiers.

**Name** GENE\_E\_Gcm\_transcription

**Reaction equation**



**Reactant**

Table 128: Properties of each reactant.

Id	Name	SBO
GENE_E_Gcm	GENE_E_Gcm	

**Modifiers**

Table 129: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_nBTCF	PROTEIN_E_nBTCF	
PROTEIN_E_SuHN	PROTEIN_E_SuHN	
PROTEIN_E_Gcm	PROTEIN_E_Gcm	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	
PROTEIN_E_FoxA	PROTEIN_E_FoxA	
PROTEIN_E_Alx1	PROTEIN_E_Alx1	

**Product**

Table 130: Properties of each product.

Id	Name	SBO
mRNA_E_Gcm	mRNA_E_Gcm	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{34} = & \left( \frac{k_{PROTEIN\_nBTcf} \cdot [PROTEIN\_E\_nBTcf]}{c_{PROTEIN\_nBTcf} + [PROTEIN\_E\_nBTcf]} \right. \\
 & + \frac{k_{PROTEIN\_SuHN} \cdot [PROTEIN\_E\_SuHN]}{c_{PROTEIN\_SuHN} + [PROTEIN\_E\_SuHN]} \\
 & \left. + \frac{k_{PROTEIN\_Gcm} \cdot [PROTEIN\_E\_Gcm]}{c_{PROTEIN\_Gcm} + [PROTEIN\_E\_Gcm]} \right) \\
 & \cdot \frac{k_{PROTEIN\_GroTCF} \cdot c_{PROTEIN\_GroTCF}}{c_{PROTEIN\_GroTCF} + [PROTEIN\_E\_GroTCF]} \\
 & \cdot \frac{k_{PROTEIN\_FoxA} \cdot c_{PROTEIN\_FoxA}}{c_{PROTEIN\_FoxA} + [PROTEIN\_E\_FoxA]} \cdot \frac{k_{PROTEIN\_Alx1} \cdot c_{PROTEIN\_Alx1}}{c_{PROTEIN\_Alx1} + [PROTEIN\_E\_Alx1]}
 \end{aligned} \tag{180}$$

Table 131: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_FoxA			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxA			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTcf			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTcf			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>

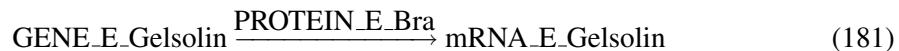
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

### 7.35 Reaction GENE\_E\_Gelsolin\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Gelsolin\_transcription

**Reaction equation**



**Reactant**

Table 132: Properties of each reactant.

Id	Name	SBO
GENE_E_Gelsolin	GENE_E_Gelsolin	

**Modifier**

Table 133: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	

**Product**

Table 134: Properties of each product.

Id	Name	SBO
mRNA_E_Gelsolin	mRNA_E_Gelsolin	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{35} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \quad (182)$$

Table 135: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					

## 7.36 Reaction GENE\_E\_HesC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_HesC\_transcription

### Reaction equation



### Reactant

Table 136: Properties of each reactant.

Id	Name	SBO
GENE_E_HesC	GENE_E_HesC	

### Modifiers

Table 137: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqHesC	PROTEIN_E_UbiqHesC	
PROTEIN_E_Pmar1	PROTEIN_E_Pmar1	

## Product

Table 138: Properties of each product.

Id	Name	SBO
mRNA_E_HesC	mRNA_E_HesC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{36} = \frac{k_{\text{PROTEIN\_UbiqHesC}} \cdot [\text{PROTEIN\_E\_UbiqHesC}]}{c_{\text{PROTEIN\_UbiqHesC}} + [\text{PROTEIN\_E\_UbiqHesC}]} \cdot \frac{k_{\text{PROTEIN\_Pmar1}} \cdot c_{\text{PROTEIN\_Pmar1}}}{c_{\text{PROTEIN\_Pmar1}} + [\text{PROTEIN\_E\_Pmar1}]} \quad (184)$$

Table 139: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqHesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqHesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Pmar1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Pmar1			1.0		<input checked="" type="checkbox"/>

## 7.37 Reaction GENE\_E\_Hex\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_Hex\_transcription

### Reaction equation



## Reactant

Table 140: Properties of each reactant.

Id	Name	SBO
GENE_E_Hex	GENE_E_Hex	

## Modifiers

Table 141: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Tgif	PROTEIN_E_Tgif	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Erg	PROTEIN_E_Erg	

## Product

Table 142: Properties of each product.

Id	Name	SBO
mRNA_E_Hex	mRNA_E_Hex	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{37} = \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_E\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_E\_Tgif}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \quad (186)$$

Table 143: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>

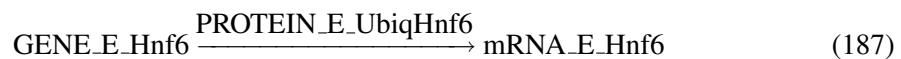
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

### 7.38 Reaction GENE\_E\_Hnf6\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Hnf6\_transcription

**Reaction equation**



**Reactant**

Table 144: Properties of each reactant.

Id	Name	SBO
GENE_E_Hnf6	GENE_E_Hnf6	

**Modifier**

Table 145: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqHnf6	PROTEIN_E_UbiqHnf6	

**Product**

Table 146: Properties of each product.

Id	Name	SBO
mRNA_E_Hnf6	mRNA_E_Hnf6	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{38} = \frac{k_{\text{PROTEIN\_UbiqHnf6}} \cdot [\text{PROTEIN\_E\_UbiqHnf6}]}{c_{\text{PROTEIN\_UbiqHnf6}} + [\text{PROTEIN\_E\_UbiqHnf6}]} \quad (188)$$

Table 147: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqHnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqHnf6			1.0		<input checked="" type="checkbox"/>

## 7.39 Reaction GENE\_E\_Hox\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_E\_Hox\_transcription

### Reaction equation



### Reactant

Table 148: Properties of each reactant.

Id	Name	SBO
GENE_E_Hox	GENE_E_Hox	

### Modifiers

Table 149: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	
PROTEIN_E_nBCF	PROTEIN_E_nBCF	
PROTEIN_E_Eve	PROTEIN_E_Eve	

Id	Name	SBO
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	

## Product

Table 150: Properties of each product.

Id	Name	SBO
mRNA_E_Hox	mRNA_E_Hox	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{39} = & \left( \frac{k_{\text{PROTEIN_Blimp1}} \cdot [\text{PROTEIN\_E_Blimp1}]}{c_{\text{PROTEIN_Blimp1}} + [\text{PROTEIN\_E_Blimp1}]} \right. \\
 & + \frac{k_{\text{PROTEIN_nTCF}} \cdot [\text{PROTEIN\_E_nTCF}]}{c_{\text{PROTEIN_nTCF}} + [\text{PROTEIN\_E_nTCF}]} \\
 & + \frac{k_{\text{PROTEIN_Eve}} \cdot [\text{PROTEIN\_E_Eve}]}{c_{\text{PROTEIN_Eve}} + [\text{PROTEIN\_E_Eve}]} + \frac{k_{\text{PROTEIN_Otx}} \cdot [\text{PROTEIN\_E_Otx}]}{c_{\text{PROTEIN_Otx}} + [\text{PROTEIN\_E_Otx}]} \Big) \\
 & \cdot \frac{k_{\text{PROTEIN_GroTCF}} \cdot c_{\text{PROTEIN_GroTCF}}}{c_{\text{PROTEIN_GroTCF}} + [\text{PROTEIN\_E_GroTCF}]}
 \end{aligned} \tag{190}$$

Table 151: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>

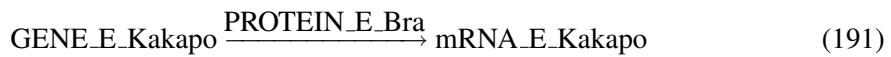
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>

## 7.40 Reaction GENE\_E\_Kakapo\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Kakapo\_transcription

**Reaction equation**



**Reactant**

Table 152: Properties of each reactant.

Id	Name	SBO
GENE_E_Kakapo	GENE_E_Kakapo	

**Modifier**

Table 153: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	

**Product**

Table 154: Properties of each product.

Id	Name	SBO
mRNA_E_Kakapo	mRNA_E_Kakapo	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{40} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \quad (192)$$

Table 155: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					

## 7.41 Reaction GENE\_E\_Lim\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Lim\_transcription

### Reaction equation



### Reactant

Table 156: Properties of each reactant.

Id	Name	SBO
GENE_E_Lim	GENE_E_Lim	

### Modifiers

Table 157: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_Otx	PROTEIN_E_Otx	

## Product

Table 158: Properties of each product.

Id	Name	SBO
mRNA_E_Lim	mRNA_E_Lim	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{41} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} \quad (194)$$

Table 159: Properties of each parameter.

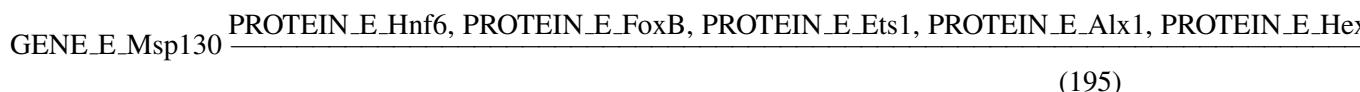
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.42 Reaction GENE\_E\_Msp130\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_E\_Msp130\_transcription

### Reaction equation



## Reactant

Table 160: Properties of each reactant.

Id	Name	SBO
GENE_E_Msp130	GENE_E_Msp130	

## Modifiers

Table 161: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	
PROTEIN_E_FoxB	PROTEIN_E_FoxB	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_Hex	PROTEIN_E_Hex	
PROTEIN_E_TBr	PROTEIN_E_TBr	
PROTEIN_E_Erg	PROTEIN_E_Erg	

## Product

Table 162: Properties of each product.

Id	Name	SBO
mRNA_E_Msp130	mRNA_E_Msp130	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{42} = \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_E\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_E\_Hnf6}]} + \frac{k_{\text{PROTEIN\_FoxB}} \cdot [\text{PROTEIN\_E\_FoxB}]}{c_{\text{PROTEIN\_FoxB}} + [\text{PROTEIN\_E\_FoxB}]} \\ + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \\ + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} \\ + \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_E\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_E\_TBr}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \quad (196)$$

Table 163: Properties of each parameter.

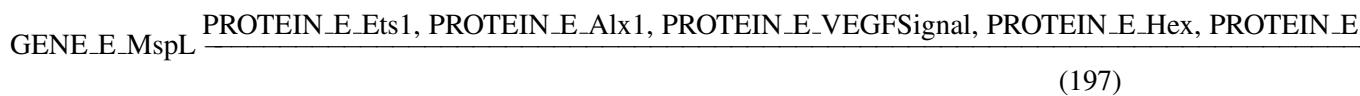
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

#### 7.43 Reaction GENE\_E\_MspL\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_E\_MspL\_transcription

#### Reaction equation



## Reactant

Table 164: Properties of each reactant.

Id	Name	SBO
GENE_E_MspL	GENE_E_MspL	

## Modifiers

Table 165: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_VEGFSignal	PROTEIN_E_VEGFSignal	
PROTEIN_E_Hex	PROTEIN_E_Hex	
PROTEIN_E_Erg	PROTEIN_E_Erg	

## Product

Table 166: Properties of each product.

Id	Name	SBO
mRNA_E_MspL	mRNA_E_MspL	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{43} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} \\ + \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_E\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_E\_VEGFSignal}]} \\ + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \quad (198)$$

Table 167: Properties of each parameter.

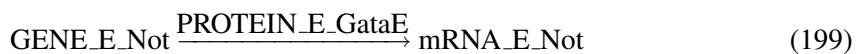
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>

#### 7.44 Reaction GENE\_E\_Non\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Non\_transcription

#### Reaction equation



#### Reactant

Table 168: Properties of each reactant.

Id	Name	SBO
GENE_E_Non	GENE_E_Non	

#### Modifier

Table 169: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	

## Product

Table 170: Properties of each product.

Id	Name	SBO
mRNA_E_Not	mRNA_E_Not	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{44} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \quad (200)$$

Table 171: Properties of each parameter.

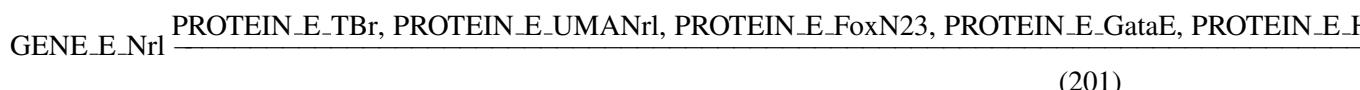
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					

## 7.45 Reaction GENE\_E\_Nrl\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by six modifiers.

**Name** GENE\_E\_Nrl\_transcription

### Reaction equation



## Reactant

Table 172: Properties of each reactant.

Id	Name	SBO
GENE_E_Nrl	GENE_E_Nrl	

## Modifiers

Table 173: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_TBr	PROTEIN_E_TBr	
PROTEIN_E_UMANrl	PROTEIN_E_UMANrl	
PROTEIN_E_FoxN23	PROTEIN_E_FoxN23	
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_HesC	PROTEIN_E_HesC	
PROTEIN_E_Tgif	PROTEIN_E_Tgif	

## Product

Table 174: Properties of each product.

Id	Name	SBO
mRNA_E_Nrl	mRNA_E_Nrl	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{45} = & \left( \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_E\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_E\_TBr}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_UMANrl}} \cdot [\text{PROTEIN\_E\_UMANrl}]}{c_{\text{PROTEIN\_UMANrl}} + [\text{PROTEIN\_E\_UMANrl}]} \\
 & + \frac{k_{\text{PROTEIN\_FoxN23}} \cdot [\text{PROTEIN\_E\_FoxN23}]}{c_{\text{PROTEIN\_FoxN23}} + [\text{PROTEIN\_E\_FoxN23}]} \Big) \\
 & \cdot \frac{k_{\text{PROTEIN\_GataE}} \cdot c_{\text{PROTEIN\_GataE}}}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]} \cdot \frac{k_{\text{PROTEIN\_Tgif}} \cdot c_{\text{PROTEIN\_Tgif}}}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_E\_Tgif}]}
 \end{aligned} \tag{202}$$

Table 175: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UMANrl			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UMANrl			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_FoxN23			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxN23			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.46 Reaction GENE\_E\_OrCt\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_OrCt\_transcription

**Reaction equation**



**Reactant**

Table 176: Properties of each reactant.

Id	Name	SBO
GENE_E_OrCt	GENE_E_OrCt	

## Modifiers

Table 177: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_E_Hox	PROTEIN_E_Hox	

## Product

Table 178: Properties of each product.

Id	Name	SBO
mRNA_E_OrCt	mRNA_E_OrCt	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{46} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_E\_Hox}]} \quad (204)$$

Table 179: Properties of each parameter.

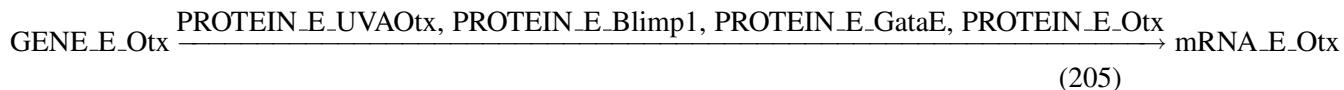
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>

## 7.47 Reaction GENE\_E\_Otx\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_Otx\_transcription

### Reaction equation



### Reactant

Table 180: Properties of each reactant.

Id	Name	SBO
GENE_E_Otx	GENE_E_Otx	

### Modifiers

Table 181: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UVAOtx	PROTEIN_E_UVAOtx	
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	
PROTEIN_E_GataE	PROTEIN_E_GataE	
PROTEIN_E_Otx	PROTEIN_E_Otx	

### Product

Table 182: Properties of each product.

Id	Name	SBO
mRNA_E_Otx	mRNA_E_Otx	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{47} = \frac{k_{PROTEIN\_UVAOtx} \cdot [PROTEIN\_E\_UVAOtx]}{c_{PROTEIN\_UVAOtx} + [PROTEIN\_E\_UVAOtx]} + \frac{k_{PROTEIN\_Blimp1} \cdot [PROTEIN\_E\_Blimp1]}{c_{PROTEIN\_Blimp1} + [PROTEIN\_E\_Blimp1]} + \frac{k_{PROTEIN\_GataE} \cdot [PROTEIN\_E\_GataE]}{c_{PROTEIN\_GataE} + [PROTEIN\_E\_GataE]} + \frac{k_{PROTEIN\_Otx} \cdot [PROTEIN\_E\_Otx]}{c_{PROTEIN\_Otx} + [PROTEIN\_E\_Otx]} \quad (206)$$

Table 183: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UVAOtx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UVAOtx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>

## 7.48 Reaction GENE\_E\_Pks\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_Pks\_transcription

**Reaction equation**



**Reactant**

Table 184: Properties of each reactant.

Id	Name	SBO
GENE_E_Pks	GENE_E_Pks	

## Modifiers

Table 185: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Gcm	PROTEIN_E_Gcm	
PROTEIN_E_GataE	PROTEIN_E_GataE	

## Product

Table 186: Properties of each product.

Id	Name	SBO
mRNA_E_Pks	mRNA_E_Pks	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{48} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_E\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_E\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \quad (208)$$

Table 187: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					

## 7.49 Reaction GENE\_E\_Pmar1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_Pmar1\_transcription

### Reaction equation



### Reactant

Table 188: Properties of each reactant.

Id	Name	SBO
GENE_E_Pmar1	GENE_E_Pmar1	

### Modifiers

Table 189: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_nBTCF	PROTEIN_E_nBTCF	
PROTEIN_E_Otx	PROTEIN_E_Otx	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	

### Product

Table 190: Properties of each product.

Id	Name	SBO
mRNA_E_Pmar1	mRNA_E_Pmar1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{49} = \left( \frac{k_{\text{PROTEIN\_nBCF}} \cdot [\text{PROTEIN\_E\_nBCF}]}{c_{\text{PROTEIN\_nBCF}} + [\text{PROTEIN\_E\_nBCF}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_E\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_E\_Otx}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_E\_GroTCF}]} \quad (210)$$

Table 191: Properties of each parameter.

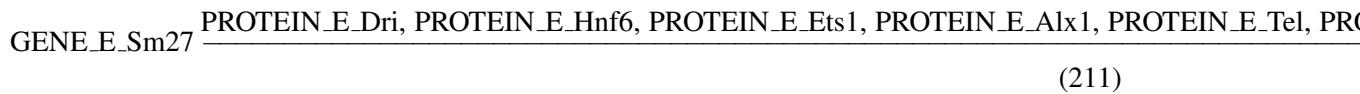
<b>Id</b>	<b>Name</b>	<b>SBO</b>	<b>Value</b>	<b>Unit</b>	<b>Constant</b>
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>

## 7.50 Reaction GENE\_E\_Sm27\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_E\_Sm27\_transcription

### Reaction equation



### Reactant

Table 192: Properties of each reactant.

<b>Id</b>	<b>Name</b>	<b>SBO</b>
GENE_E_Sm27	GENE_E_Sm27	

Id	Name	SBO
----	------	-----

## Modifiers

Table 193: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Dri	PROTEIN_E_Dri	
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_Tel	PROTEIN_E_Tel	
PROTEIN_E_Hex	PROTEIN_E_Hex	
PROTEIN_E_Erg	PROTEIN_E_Erg	

## Product

Table 194: Properties of each product.

Id	Name	SBO
mRNA_E_Sm27	mRNA_E_Sm27	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{50} = \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_E\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_E\_Dri}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_E\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_E\_Hnf6}]} \\ + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \\ + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} + \frac{k_{\text{PROTEIN\_Tel}} \cdot [\text{PROTEIN\_E\_Tel}]}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_E\_Tel}]} \\ + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \quad (212)$$

Table 195: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.51 Reaction GENE\_E\_Sm30\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Sm30\_transcription

**Reaction equation**



## Reactant

Table 196: Properties of each reactant.

Id	Name	SBO
GENE_E_Sm30	GENE_E_Sm30	

## Modifier

Table 197: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_VEGFSignal	PROTEIN_E_VEGFSignal	

## Product

Table 198: Properties of each product.

Id	Name	SBO
mRNA_E_Sm30	mRNA_E_Sm30	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{51} = \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_E\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_E\_VEGFSignal}]} \quad (214)$$

Table 199: Properties of each parameter.

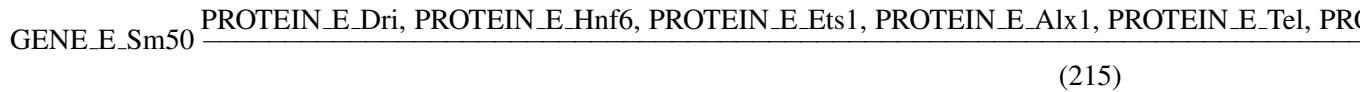
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN- _VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN- _VEGFSignal			1.0		<input checked="" type="checkbox"/>

## 7.52 Reaction GENE\_E\_Sm50\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by eight modifiers.

**Name** GENE\_E\_Sm50\_transcription

### Reaction equation



### Reactant

Table 200: Properties of each reactant.

Id	Name	SBO
GENE_E_Sm50	GENE_E_Sm50	

### Modifiers

Table 201: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Dri	PROTEIN_E_Dri	
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_Tel	PROTEIN_E_Tel	
PROTEIN_E_Hex	PROTEIN_E_Hex	
PROTEIN_E_Erg	PROTEIN_E_Erg	
PROTEIN_E_VEGFSignal	PROTEIN_E_VEGFSignal	

### Product

Table 202: Properties of each product.

Id	Name	SBO
mRNA_E_Sm50	mRNA_E_Sm50	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{52} = & \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_E\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_E\_Dri}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_E\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_E\_Hnf6}]} \\
& + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \\
& + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} + \frac{k_{\text{PROTEIN\_Tel}} \cdot [\text{PROTEIN\_E\_Tel}]}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_E\_Tel}]} \\
& + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} \\
& + \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_E\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_E\_VEGFSignal}]}
\end{aligned} \tag{216}$$

Table 203: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.53 Reaction GENE\_E\_Snail\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_E\_Snail\_transcription

**Reaction equation**



**Reactant**

Table 204: Properties of each reactant.

Id	Name	SBO
GENE_E_Snail	GENE_E_Snail	

**Modifier**

Table 205: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Hex	PROTEIN_E_Hex	

**Product**

Table 206: Properties of each product.

Id	Name	SBO
mRNA_E_Snail	mRNA_E_Snail	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{53} = \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} \quad (218)$$

Table 207: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>

## 7.54 Reaction GENE\_E\_SoxB1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_SoxB1\_transcription

### Reaction equation



### Reactant

Table 208: Properties of each reactant.

Id	Name	SBO
GENE_E_SoxB1	GENE_E_SoxB1	

### Modifiers

Table 209: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqSoxB1	PROTEIN_E_UbiqSoxB1	
PROTEIN_E_SoxB1	PROTEIN_E_SoxB1	

### Product

Table 210: Properties of each product.

Id	Name	SBO
mRNA_E_SoxB1	mRNA_E_SoxB1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{54} = \frac{k_{\text{PROTEIN\_UbiqSoxB1}} \cdot [\text{PROTEIN\_E\_UbiqSoxB1}]}{c_{\text{PROTEIN\_UbiqSoxB1}} + [\text{PROTEIN\_E\_UbiqSoxB1}]} \cdot \frac{k_{\text{PROTEIN\_SoxB1}} \cdot c_{\text{PROTEIN\_SoxB1}}}{c_{\text{PROTEIN\_SoxB1}} + [\text{PROTEIN\_E\_SoxB1}]} \quad (220)$$

Table 211: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqSoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqSoxB1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-SoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-SoxB1			1.0		<input checked="" type="checkbox"/>

### 7.55 Reaction GENE\_E\_SoxC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_SoxC\_transcription

#### Reaction equation



#### Reactant

Table 212: Properties of each reactant.

Id	Name	SBO
GENE_E_SoxC	GENE_E_SoxC	

## Modifiers

Table 213: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqSoxC	PROTEIN_E_UbiqSoxC	
PROTEIN_E_HesC	PROTEIN_E_HesC	
PROTEIN_E_SoxC	PROTEIN_E_SoxC	

## Product

Table 214: Properties of each product.

Id	Name	SBO
mRNA_E_SoxC	mRNA_E_SoxC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{55} = \frac{k_{\text{PROTEIN\_UbiqSoxC}} \cdot [\text{PROTEIN\_E\_UbiqSoxC}]}{c_{\text{PROTEIN\_UbiqSoxC}} + [\text{PROTEIN\_E\_UbiqSoxC}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]} \cdot \frac{k_{\text{PROTEIN\_SoxC}} \cdot c_{\text{PROTEIN\_SoxC}}}{c_{\text{PROTEIN\_SoxC}} + [\text{PROTEIN\_E\_SoxC}]} \quad (222)$$

Table 215: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SoxC					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SoxC					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_HesC					

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqSoxC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqSoxC			1.0		<input checked="" type="checkbox"/>

## 7.56 Reaction GENE\_E\_SuTx\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_E\_SuTx\_transcription

**Reaction equation**



**Reactant**

Table 216: Properties of each reactant.

Id	Name	SBO
GENE_E_SuTx	GENE_E_SuTx	

**Modifiers**

Table 217: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Gcm	PROTEIN_E_Gcm	
PROTEIN_E_GataE	PROTEIN_E_GataE	

**Product**

Table 218: Properties of each product.

Id	Name	SBO
mRNA_E_SuTx	mRNA_E_SuTx	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{56} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_E\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_E\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_E\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_E\_GataE}]} \quad (224)$$

Table 219: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

## 7.57 Reaction GENE\_E\_TBr\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_TBr\_transcription

### Reaction equation



### Reactant

Table 220: Properties of each reactant.

Id	Name	SBO
GENE_E_TBr	GENE_E_TBr	

### Modifiers

Table 221: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_HesC	PROTEIN_E_HesC	
PROTEIN_E_TBr	PROTEIN_E_TBr	

## Product

Table 222: Properties of each product.

Id	Name	SBO
mRNA_E_TBr	mRNA_E_TBr	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{57} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]} \\ \cdot \frac{k_{\text{PROTEIN\_TBr}} \cdot c_{\text{PROTEIN\_TBr}}}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_E\_TBr}]} \quad (226)$$

Table 223: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>

## 7.58 Reaction GENE\_E\_Tel\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_Tel\_transcription

### Reaction equation



### Reactant

Table 224: Properties of each reactant.

Id	Name	SBO
GENE_E_Tel	GENE_E_Tel	

### Modifiers

Table 225: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_UbiqTel	PROTEIN_E_UbiqTel	
PROTEIN_E_Tel	PROTEIN_E_Tel	
PROTEIN_E_HesC	PROTEIN_E_HesC	

### Product

Table 226: Properties of each product.

Id	Name	SBO
mRNA_E_Tel	mRNA_E_Tel	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{58} = \frac{k_{\text{PROTEIN\_UbiqTel}} \cdot [\text{PROTEIN\_E\_UbiqTel}]}{c_{\text{PROTEIN\_UbiqTel}} + [\text{PROTEIN\_E\_UbiqTel}]} \cdot \frac{k_{\text{PROTEIN\_Tel}} \cdot c_{\text{PROTEIN\_Tel}}}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_E\_Tel}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_E\_HesC}]} \quad (228)$$

Table 227: Properties of each parameter.

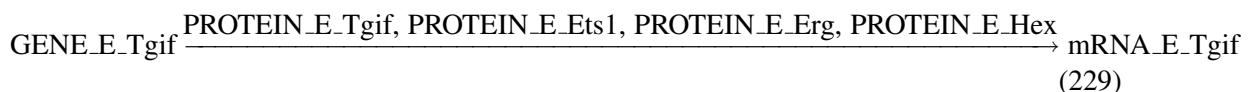
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UbiqTel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqTel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>

## 7.59 Reaction GENE\_E\_Tgif\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_Tgif\_transcription

### Reaction equation



### Reactant

Table 228: Properties of each reactant.

Id	Name	SBO
GENE_E_Tgif	GENE_E_Tgif	

### Modifiers

Table 229: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Tgif	PROTEIN_E_Tgif	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Erg	PROTEIN_E_Erg	
PROTEIN_E_Hex	PROTEIN_E_Hex	

## Product

Table 230: Properties of each product.

Id	Name	SBO
mRNA_E_Tgif	mRNA_E_Tgif	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{59} = \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_E\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_E\_Tgif}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_E\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_E\_Erg}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} \quad (230)$$

Table 231: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Erg					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Erg					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Tgif					

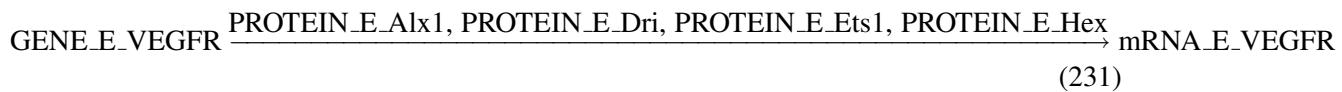
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

## 7.60 Reaction GENE\_E\_VEGFR\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_E\_VEGFR\_transcription

### Reaction equation



### Reactant

Table 232: Properties of each reactant.

Id	Name	SBO
GENE_E_VEGFR	GENE_E_VEGFR	

### Modifiers

Table 233: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Alx1	PROTEIN_E_Alx1	
PROTEIN_E_Dri	PROTEIN_E_Dri	
PROTEIN_E_Ets1	PROTEIN_E_Ets1	
PROTEIN_E_Hex	PROTEIN_E_Hex	

### Product

Table 234: Properties of each product.

Id	Name	SBO
mRNA_E_VEGFR	mRNA_E_VEGFR	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{60} = \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_E\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_E\_Alx1}]} + \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_E\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_E\_Dri}]} \\ + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_E\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_E\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_E\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_E\_Hex}]} \quad (232)$$

Table 235: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>

## 7.61 Reaction GENE\_E\_Wnt8\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_Wnt8\_transcription

### Reaction equation



### Reactant

Table 236: Properties of each reactant.

Id	Name	SBO
GENE_E_Wnt8	GENE_E_Wnt8	

## Modifiers

Table 237: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_nBTF	PROTEIN_E_nBTF	
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	

## Product

Table 238: Properties of each product.

Id	Name	SBO
mRNA_E_Wnt8	mRNA_E_Wnt8	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{61} = \left( \frac{k_{\text{PROTEIN\_nBTF}} \cdot [\text{PROTEIN\_E\_nBTF}]}{c_{\text{PROTEIN\_nBTF}} + [\text{PROTEIN\_E\_nBTF}]} + \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_E\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_E\_Blimp1}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_E\_GroTCF}]} \quad (234)$$

Table 239: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTCF					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTCF					

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>

## 7.62 Reaction GENE\_E\_z13\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_E\_z13\_transcription

**Reaction equation**



**Reactant**

Table 240: Properties of each reactant.

Id	Name	SBO
GENE_E_z13	GENE_E_z13	

**Modifiers**

Table 241: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_nBTF	PROTEIN_E_nBTF	
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	

**Product**

Table 242: Properties of each product.

Id	Name	SBO
mRNA_E_z13	mRNA_E_z13	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{62} = \frac{k_{\text{PROTEIN\_nTCF}} \cdot [\text{PROTEIN\_E\_nTCF}]}{c_{\text{PROTEIN\_nTCF}} + [\text{PROTEIN\_E\_nTCF}]} \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_E\_GroTCF}]} \cdot \frac{k_{\text{PROTEIN\_Hnf6}} \cdot c_{\text{PROTEIN\_Hnf6}}}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_E\_Hnf6}]} \quad (236)$$

Table 243: Properties of each parameter.

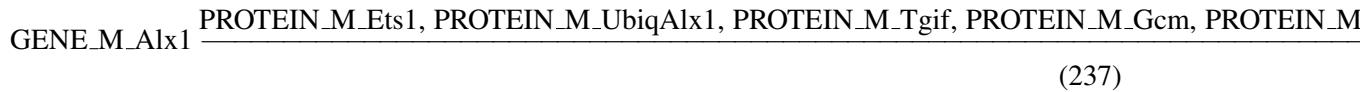
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.63 Reaction GENE\_M\_Alx1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_M\_Alx1\_transcription

## Reaction equation



## Reactant

Table 244: Properties of each reactant.

Id	Name	SBO
GENE_M_Alx1	GENE_M_Alx1	

## Modifiers

Table 245: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_UbiqAlx1	PROTEIN_M_UbiqAlx1	
PROTEIN_M_Tgif	PROTEIN_M_Tgif	
PROTEIN_M_Gcm	PROTEIN_M_Gcm	
PROTEIN_M_HesC	PROTEIN_M_HesC	

## Product

Table 246: Properties of each product.

Id	Name	SBO
mRNA_M_Alx1	mRNA_M_Alx1	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{63} = & \left( \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \right. \\
& + \frac{k_{\text{PROTEIN\_UbiqAlx1}} \cdot [\text{PROTEIN\_M\_UbiqAlx1}]}{c_{\text{PROTEIN\_UbiqAlx1}} + [\text{PROTEIN\_M\_UbiqAlx1}]} \\
& \left. + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_M\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_M\_Tgif}]} \right) \\
& \cdot \frac{k_{\text{PROTEIN\_Gcm}} \cdot c_{\text{PROTEIN\_Gcm}}}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_M\_Gcm}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \quad (238)
\end{aligned}$$

Table 247: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UbiqAlx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqAlx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

## 7.64 Reaction GENE\_M\_Apobec\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Apobec\_transcription

## Reaction equation



## Reactant

Table 248: Properties of each reactant.

Id	Name	SBO
GENE_M_Apobec	GENE_M_Apobec	

## Modifiers

Table 249: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Bra	PROTEIN_M_Bra	
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_M_Hox	PROTEIN_M_Hox	

## Product

Table 250: Properties of each product.

Id	Name	SBO
mRNA_M_Apobec	mRNA_M_Apobec	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{64} = \left( \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_M\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_M\_Bra}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \right) \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_M\_Hox}]} \quad (240)$$

Table 251: Properties of each parameter.

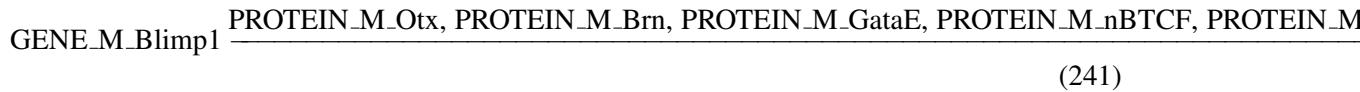
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>

## 7.65 Reaction GENE\_M\_Blimp1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_M\_Blimp1\_transcription

### Reaction equation



### Reactant

Table 252: Properties of each reactant.

Id	Name	SBO
GENE_M_Blimp1	GENE_M_Blimp1	

### Modifiers

Table 253: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_Brn	PROTEIN_M_Brn	
PROTEIN_M_GataE	PROTEIN_M_GataE	
PROTEIN_M_nBTF	PROTEIN_M_nBTF	
PROTEIN_M_Eve	PROTEIN_M_Eve	
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	

Id	Name	SBO
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Product

Table 254: Properties of each product.

Id	Name	SBO
mRNA_M_Blimp1	mRNA_M_Blimp1	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{65} = & \left( \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_M\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_M\_Otx}]} + \frac{k_{\text{PROTEIN\_Brn}} \cdot [\text{PROTEIN\_M\_Brn}]}{c_{\text{PROTEIN\_Brn}} + [\text{PROTEIN\_M\_Brn}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \\
 & + \frac{k_{\text{PROTEIN\_nBTF}} \cdot [\text{PROTEIN\_M\_nBTF}]}{c_{\text{PROTEIN\_nBTF}} + [\text{PROTEIN\_M\_nBTF}]} \\
 & \left. + \frac{k_{\text{PROTEIN\_Eve}} \cdot [\text{PROTEIN\_M\_Eve}]}{c_{\text{PROTEIN\_Eve}} + [\text{PROTEIN\_M\_Eve}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_Blimp1}} \cdot c_{\text{PROTEIN\_Blimp1}}}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_M\_Blimp1}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_M\_GroTCF}]}
 \end{aligned} \tag{242}$$

Table 255: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Brn			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Eve			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Eve			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.66 Reaction GENE\_M\_Bra\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_Bra\_transcription

### Reaction equation



### Reactant

Table 256: Properties of each reactant.

Id	Name	SBO
GENE_M_Bra	GENE_M_Bra	

### Modifiers

Table 257: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Product

Table 258: Properties of each product.

Id	Name	SBO
mRNA_M_Bra	mRNA_M_Bra	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{66} = \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_nBTcf}} \cdot [\text{PROTEIN\_M\_nBTcf}]}{c_{\text{PROTEIN\_nBTcf}} + [\text{PROTEIN\_M\_nBTcf}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_M\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_M\_Otx}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_M\_GroTCF}]} \quad (244)$$

Table 259: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-GataE			1.0		<input checked="" type="checkbox"/>

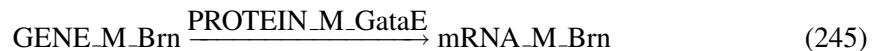
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTCF			1.0		<input checked="" type="checkbox"/>

## 7.67 Reaction GENE\_M\_Brn\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_Brn\_transcription

**Reaction equation**



**Reactant**

Table 260: Properties of each reactant.

Id	Name	SBO
GENE_M_Brn	GENE_M_Brn	

**Modifier**

Table 261: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	

**Product**

Table 262: Properties of each product.

Id	Name	SBO
mRNA_M_Brn	mRNA_M_Brn	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{67} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \quad (246)$$

Table 263: Properties of each parameter.

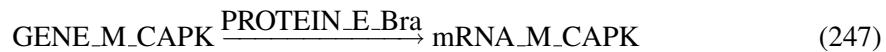
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					

## 7.68 Reaction GENE\_M\_CAPK\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_CAPK\_transcription

### Reaction equation



### Reactant

Table 264: Properties of each reactant.

Id	Name	SBO
GENE_M_CAPK	GENE_M_CAPK	

### Modifier

Table 265: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	

### Product

Table 266: Properties of each product.

Id	Name	SBO
mRNA_M_CAPK	mRNA_M_CAPK	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{68} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \quad (248)$$

Table 267: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>

### 7.69 Reaction GENE\_M\_CyP\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_CyP\_transcription

#### Reaction equation



#### Reactant

Table 268: Properties of each reactant.

Id	Name	SBO
GENE_M_CyP	GENE_M_CyP	

#### Modifiers

Table 269: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Dri	PROTEIN_M_Dri	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_SoxB1	PROTEIN_M_SoxB1	

## Product

Table 270: Properties of each product.

Id	Name	SBO
mRNA_M_CyP	mRNA_M_CyP	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{69} = \left( \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_M\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_M\_Dri}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \right) \cdot \frac{k_{\text{PROTEIN\_SoxB1}} \cdot c_{\text{PROTEIN\_SoxB1}}}{c_{\text{PROTEIN\_SoxB1}} + [\text{PROTEIN\_M\_SoxB1}]} \quad (250)$$

Table 271: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SoxB1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>

## 7.70 Reaction GENE\_M\_Delta\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_Delta\_transcription

### Reaction equation



### Reactant

Table 272: Properties of each reactant.

Id	Name	SBO
GENE_M_Delta	GENE_M_Delta	

### Modifiers

Table 273: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqDelta	PROTEIN_M_UbiqDelta	
PROTEIN_M_UMADelta	PROTEIN_M_UMADelta	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_HesC	PROTEIN_M_HesC	

### Product

Table 274: Properties of each product.

Id	Name	SBO
mRNA_M_Delta	mRNA_M_Delta	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{70} = \left( \frac{k_{\text{PROTEIN\_UbiqDelta}} \cdot [\text{PROTEIN\_M\_UbiqDelta}]}{c_{\text{PROTEIN\_UbiqDelta}} + [\text{PROTEIN\_M\_UbiqDelta}]} + \frac{k_{\text{PROTEIN\_UMADelta}} \cdot [\text{PROTEIN\_M\_UMADelta}]}{c_{\text{PROTEIN\_UMADelta}} + [\text{PROTEIN\_M\_UMADelta}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \right) \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \quad (252)$$

Table 275: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqDelta			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqDelta			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UMADelta			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UMADelta			1.0		<input checked="" type="checkbox"/>

## 7.71 Reaction GENE\_M\_Dpt\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Dpt\_transcription

### Reaction equation



### Reactant

Table 276: Properties of each reactant.

Id	Name	SBO
GENE_M_Dpt	GENE_M_Dpt	

## Modifiers

Table 277: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_M_Gcm	PROTEIN_M_Gcm	

## Product

Table 278: Properties of each product.

Id	Name	SBO
mRNA_M_Dpt	mRNA_M_Dpt	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{71} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} + \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_M\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_M\_Gcm}]} \quad (254)$$

Table 279: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Gcm			1.0		<input checked="" type="checkbox"/>

## 7.72 Reaction GENE\_M\_Dri\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Dri\_transcription

**Reaction equation**



**Reactant**

Table 280: Properties of each reactant.

Id	Name	SBO
GENE_M_Dri	GENE_M_Dri	

**Modifiers**

Table 281: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	

**Product**

Table 282: Properties of each product.

Id	Name	SBO
mRNA_M_Dri	mRNA_M_Dri	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{72} = \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \quad (256)$$

Table 283: Properties of each parameter.

<b>Id</b>	<b>Name</b>	<b>SBO</b>	<b>Value</b>	<b>Unit</b>	<b>Constant</b>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					

### 7.73 Reaction GENE\_M\_Endo16\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Endo16\_transcription

#### Reaction equation



#### Reactant

Table 284: Properties of each reactant.

<b>Id</b>	<b>Name</b>	<b>SBO</b>
GENE_M_Endo16	GENE_M_Endo16	

#### Modifiers

Table 285: Properties of each modifier.

<b>Id</b>	<b>Name</b>	<b>SBO</b>
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_Brn	PROTEIN_M_Brn	

#### Product

Table 286: Properties of each product.

Id	Name	SBO
mRNA_M_Endo16	mRNA_M_Endo16	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{73} = \frac{k_{PROTEIN\_Otx} \cdot [PROTEIN\_M\_Otx]}{c_{PROTEIN\_Otx} + [PROTEIN\_M\_Otx]} + \frac{k_{PROTEIN\_Brn} \cdot [PROTEIN\_M\_Brn]}{c_{PROTEIN\_Brn} + [PROTEIN\_M\_Brn]} \quad (258)$$

Table 287: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>

### 7.74 Reaction GENE\_M\_Erg\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Erg\_transcription

#### Reaction equation



#### Reactant

Table 288: Properties of each reactant.

Id	Name	SBO
GENE_M_Erg	GENE_M_Erg	

## Modifiers

Table 289: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_TBr	PROTEIN_M_TBr	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Hex	PROTEIN_M_Hex	

## Product

Table 290: Properties of each product.

Id	Name	SBO
mRNA_M_Erg	mRNA_M_Erg	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{74} = \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_M\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_M\_TBr}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} \quad (260)$$

Table 291: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>

## 7.75 Reaction GENE\_M\_Ets1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Ets1\_transcription

### Reaction equation



### Reactant

Table 292: Properties of each reactant.

Id	Name	SBO
GENE_M_Ets1	GENE_M_Ets1	

### Modifiers

Table 293: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqEts1	PROTEIN_M_UbiqEts1	
PROTEIN_M_HesC	PROTEIN_M_HesC	

### Product

Table 294: Properties of each product.

Id	Name	SBO
mRNA_M_Ets1	mRNA_M_Ets1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{75} = \frac{k_{\text{PROTEIN\_UbiqEts1}} \cdot [\text{PROTEIN\_M\_UbiqEts1}]}{c_{\text{PROTEIN\_UbiqEts1}} + [\text{PROTEIN\_M\_UbiqEts1}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \quad (262)$$

Table 295: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UbiqEts1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqEts1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>

## 7.76 Reaction GENE\_M\_Eve\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_Eve\_transcription

### Reaction equation



### Reactant

Table 296: Properties of each reactant.

Id	Name	SBO
GENE_M_Eve	GENE_M_Eve	

### Modifiers

Table 297: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	
PROTEIN_M_Hox	PROTEIN_M_Hox	

### Product

Table 298: Properties of each product.

Id	Name	SBO
mRNA_M_Eve	mRNA_M_Eve	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{76} = \left( \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_M\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_M\_Blimp1}]} + \frac{k_{\text{PROTEIN\_nTCF}} \cdot [\text{PROTEIN\_M\_nTCF}]}{c_{\text{PROTEIN\_nTCF}} + [\text{PROTEIN\_M\_nTCF}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_M\_GroTCF}]} \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_M\_Hox}]} \quad (264)$$

Table 299: Properties of each parameter.

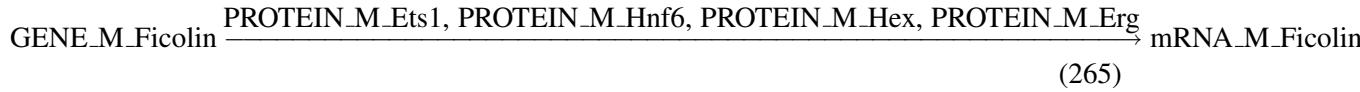
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>

### 7.77 Reaction GENE\_M\_Ficolin\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_Ficolin\_transcription

### Reaction equation



### Reactant

Table 300: Properties of each reactant.

Id	Name	SBO
GENE_M_Ficolin	GENE_M_Ficolin	

### Modifiers

Table 301: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	
PROTEIN_M_Hex	PROTEIN_M_Hex	
PROTEIN_M_Erg	PROTEIN_M_Erg	

### Product

Table 302: Properties of each product.

Id	Name	SBO
mRNA_M_Ficolin	mRNA_M_Ficolin	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned} v_{77} = & \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_M\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_M\_Hnf6}]} \\ & + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]} \end{aligned} \quad (266)$$

Table 303: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.78 Reaction GENE\_M\_FoxA\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_M\_FoxA\_transcription

### Reaction equation



### Reactant

Table 304: Properties of each reactant.

Id	Name	SBO
GENE_M_FoxA	GENE_M_FoxA	

### Modifiers

Table 305: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_Bra	PROTEIN_M_Bra	
PROTEIN_M_Tgif	PROTEIN_M_Tgif	
PROTEIN_M_GroTFC	PROTEIN_M_GroTFC	
PROTEIN_M_FoxA	PROTEIN_M_FoxA	

## Product

Table 306: Properties of each product.

Id	Name	SBO
mRNA_M_FoxA	mRNA_M_FoxA	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{78} = & \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_nBTcf}} \cdot [\text{PROTEIN\_M\_nBTcf}]}{c_{\text{PROTEIN\_nBTcf}} + [\text{PROTEIN\_M\_nBTcf}]} \\
 & + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_M\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_M\_Otx}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_M\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_M\_Bra}]} \\
 & \left. + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_M\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_M\_Tgif}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_GroTFC}} \cdot c_{\text{PROTEIN\_GroTFC}}}{c_{\text{PROTEIN\_GroTFC}} + [\text{PROTEIN\_M\_GroTFC}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_FoxA}} \cdot c_{\text{PROTEIN\_FoxA}}}{c_{\text{PROTEIN\_FoxA}} + [\text{PROTEIN\_M\_FoxA}]}
 \end{aligned} \tag{268}$$

Table 307: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTFC			1.0		<input checked="" type="checkbox"/>

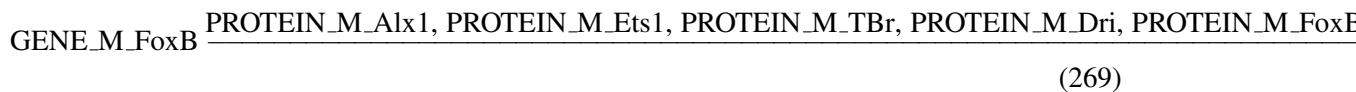
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTFC					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_FoxA					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_FoxA					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_nBTF					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_nBTF					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Tgff					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Tgff					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Otx					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Otx					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					<input checked="" type="checkbox"/>

## 7.79 Reaction GENE\_M\_FoxB\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_M\_FoxB\_transcription

### Reaction equation



### Reactant

Table 308: Properties of each reactant.

Id	Name	SBO
GENE_M_FoxB	GENE_M_FoxB	

## Modifiers

Table 309: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_TBr	PROTEIN_M_TBr	
PROTEIN_M_Dri	PROTEIN_M_Dri	
PROTEIN_M_FoxB	PROTEIN_M_FoxB	

## Product

Table 310: Properties of each product.

Id	Name	SBO
mRNA_M_FoxB	mRNA_M_FoxB	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{79} = \left( \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_M\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_M\_TBr}]} + \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_M\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_M\_Dri}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_FoxB}} \cdot c_{\text{PROTEIN\_FoxB}}}{c_{\text{PROTEIN\_FoxB}} + [\text{PROTEIN\_M\_FoxB}]} \quad (270)$$

Table 311: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Dri					<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Dri					<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_FoxB			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_FoxB			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					<input checked="" type="checkbox"/>

## 7.80 Reaction GENE\_M\_FoxN23\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_FoxN23\_transcription

### Reaction equation



### Reactant

Table 312: Properties of each reactant.

Id	Name	SBO
GENE_M_FoxN23	GENE_M_FoxN23	

### Modifier

Table 313: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_nBTMF	PROTEIN_M_nBTMF	

## Product

Table 314: Properties of each product.

Id	Name	SBO
mRNA_M_FoxN23	mRNA_M_FoxN23	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{80} = \frac{k_{\text{PROTEIN\_nBTMF}} \cdot [\text{PROTEIN\_M\_nBTMF}]}{c_{\text{PROTEIN\_nBTMF}} + [\text{PROTEIN\_M\_nBTMF}]} \quad (272)$$

Table 315: Properties of each parameter.

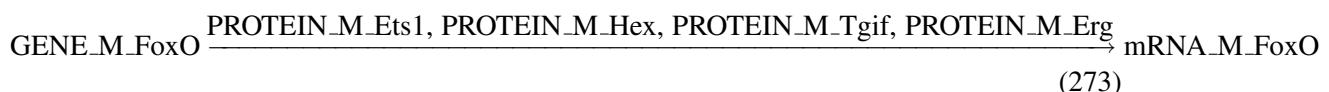
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-nBTMF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTMF			1.0		<input checked="" type="checkbox"/>

## 7.81 Reaction GENE\_M\_FoxO\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_FoxO\_transcription

### Reaction equation



## Reactant

Table 316: Properties of each reactant.

Id	Name	SBO
GENE_M_FoxO	GENE_M_FoxO	

## Modifiers

Table 317: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Hex	PROTEIN_M_Hex	
PROTEIN_M_Tgif	PROTEIN_M_Tgif	
PROTEIN_M_Erg	PROTEIN_M_Erg	

## Product

Table 318: Properties of each product.

Id	Name	SBO
mRNA_M_FoxO	mRNA_M_FoxO	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{81} = \frac{k_{PROTEIN\_Ets1} \cdot [PROTEIN\_M\_Ets1]}{c_{PROTEIN\_Ets1} + [PROTEIN\_M\_Ets1]} + \frac{k_{PROTEIN\_Hex} \cdot [PROTEIN\_M\_Hex]}{c_{PROTEIN\_Hex} + [PROTEIN\_M\_Hex]} \\ + \frac{k_{PROTEIN\_Tgif} \cdot [PROTEIN\_M\_Tgif]}{c_{PROTEIN\_Tgif} + [PROTEIN\_M\_Tgif]} + \frac{k_{PROTEIN\_Erg} \cdot [PROTEIN\_M\_Erg]}{c_{PROTEIN\_Erg} + [PROTEIN\_M\_Erg]} \quad (274)$$

Table 319: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>

## 7.82 Reaction GENE\_M\_FvMo\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_FvMo\_transcription

**Reaction equation**



**Reactant**

Table 320: Properties of each reactant.

Id	Name	SBO
GENE_M_FvMo	GENE_M_FvMo	

**Modifiers**

Table 321: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Gcm	PROTEIN_M_Gcm	
PROTEIN_M_GataE	PROTEIN_M_GataE	

**Product**

Table 322: Properties of each product.

Id	Name	SBO
mRNA_M_FvMo	mRNA_M_FvMo	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{82} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_M\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_M\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \quad (276)$$

Table 323: Properties of each parameter.

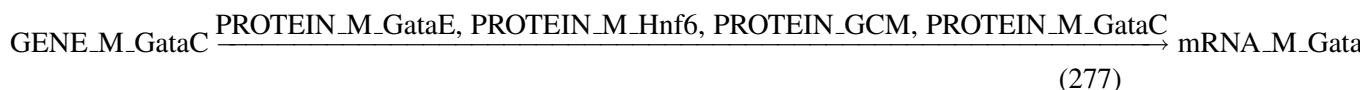
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					

### 7.83 Reaction GENE\_M\_GataC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_GataC\_transcription

#### Reaction equation



#### Reactant

Table 324: Properties of each reactant.

Id	Name	SBO
GENE_M_GataC	GENE_M_GataC	

Id	Name	SBO

## Modifiers

Table 325: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	
PROTEIN_GCM	PROTEIN_GCM	
PROTEIN_M_GataC	PROTEIN_M_GataC	

## Product

Table 326: Properties of each product.

Id	Name	SBO
mRNA_M_GataC	mRNA_M_GataC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{83} = \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_M\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_M\_Hnf6}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_GCM}} \cdot [\text{PROTEIN\_GCM}]}{c_{\text{PROTEIN\_GCM}} + [\text{PROTEIN\_GCM}]} \right) \cdot \frac{k_{\text{PROTEIN\_GataC}} \cdot c_{\text{PROTEIN\_GataC}}}{c_{\text{PROTEIN\_GataC}} + [\text{PROTEIN\_M\_GataC}]} \quad (278)$$

Table 327: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GataC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GataC			1.0		<input checked="" type="checkbox"/>

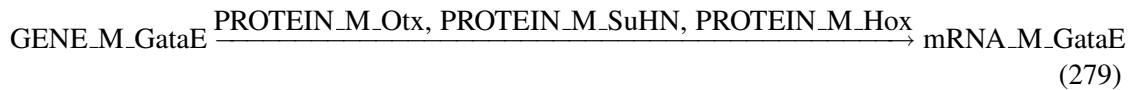
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GCM			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GCM			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.84 Reaction GENE\_M\_GataE\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_GataE\_transcription

### Reaction equation



### Reactant

Table 328: Properties of each reactant.

Id	Name	SBO
GENE_M_GataE	GENE_M_GataE	

### Modifiers

Table 329: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_SuHN	PROTEIN_M_SuHN	
PROTEIN_M_Hox	PROTEIN_M_Hox	

## Product

Table 330: Properties of each product.

Id	Name	SBO
mRNA_M_GataE	mRNA_M_GataE	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{84} = \left( \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_M\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_M\_Otx}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_SuHN}} \cdot [\text{PROTEIN\_M\_SuHN}]}{c_{\text{PROTEIN\_SuHN}} + [\text{PROTEIN\_M\_SuHN}]} \right) \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_M\_Hox}]} \quad (280)$$

Table 331: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Otx					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Otx					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hox					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hox					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SuHN					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SuHN					

## 7.85 Reaction GENE\_M\_Gcad\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Gcad\_transcription

## Reaction equation



## Reactant

Table 332: Properties of each reactant.

Id	Name	SBO
GENE_M_Gcad	GENE_M_Gcad	

## Modifiers

Table 333: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqGcad	PROTEIN_M_UbiqGcad	
PROTEIN_M_Snail	PROTEIN_M_Snail	

## Product

Table 334: Properties of each product.

Id	Name	SBO
mRNA_M_Gcad	mRNA_M_Gcad	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{85} = \frac{k_{\text{PROTEIN\_UbiqGcad}} \cdot [\text{PROTEIN\_M\_UbiqGcad}]}{c_{\text{PROTEIN\_UbiqGcad}} + [\text{PROTEIN\_M\_UbiqGcad}]} \cdot \frac{k_{\text{PROTEIN\_Snail}} \cdot c_{\text{PROTEIN\_Snail}}}{c_{\text{PROTEIN\_Snail}} + [\text{PROTEIN\_M\_Snail}]} \quad (282)$$

Table 335: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Snail			1.0		<input checked="" type="checkbox"/>

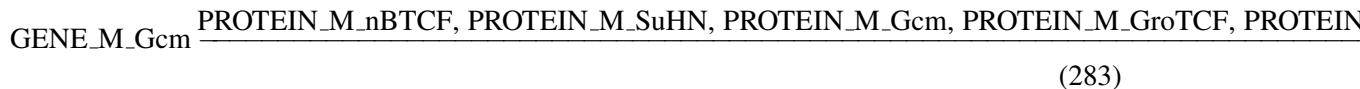
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Snail			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqGcad			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqGcad			1.0		<input checked="" type="checkbox"/>

## 7.86 Reaction GENE\_M\_Gcm\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by six modifiers.

**Name** GENE\_M\_Gcm\_transcription

### Reaction equation



### Reactant

Table 336: Properties of each reactant.

Id	Name	SBO
GENE_M_Gcm	GENE_M_Gcm	

### Modifiers

Table 337: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	
PROTEIN_M_SuHN	PROTEIN_M_SuHN	
PROTEIN_M_Gcm	PROTEIN_M_Gcm	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	
PROTEIN_M_FoxA	PROTEIN_M_FoxA	
PROTEIN_M_Alx1	PROTEIN_M_Alx1	

### Product

Table 338: Properties of each product.

Id	Name	SBO
mRNA_M_Gcm	mRNA_M_Gcm	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{86} = & \left( \frac{k_{\text{PROTEIN\_nBCF}} \cdot [\text{PROTEIN\_M\_nBCF}]}{c_{\text{PROTEIN\_nBCF}} + [\text{PROTEIN\_M\_nBCF}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_SuHN}} \cdot [\text{PROTEIN\_M\_SuHN}]}{c_{\text{PROTEIN\_SuHN}} + [\text{PROTEIN\_M\_SuHN}]} \\
 & \left. + \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_M\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_M\_Gcm}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_M\_GroTCF}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_FoxA}} \cdot c_{\text{PROTEIN\_FoxA}}}{c_{\text{PROTEIN\_FoxA}} + [\text{PROTEIN\_M\_FoxA}]} \cdot \frac{k_{\text{PROTEIN\_Alx1}} \cdot c_{\text{PROTEIN\_Alx1}}}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} \quad (284)
 \end{aligned}$$

Table 339: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_FoxA			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxA			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

## 7.87 Reaction GENE\_M\_Gelsolin\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Gelsolin\_transcription

**Reaction equation**



**Reactant**

Table 340: Properties of each reactant.

Id	Name	SBO
GENE_M_Gelsolin	GENE_M_Gelsolin	

**Modifiers**

Table 341: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Bra	PROTEIN_M_Bra	
PROTEIN_E_Bra	PROTEIN_E_Bra	

**Product**

Table 342: Properties of each product.

Id	Name	SBO
mRNA_M_Gelsolin	mRNA_M_Gelsolin	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{87} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_M\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_M\_Bra}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \quad (286)$$

Table 343: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					

## 7.88 Reaction GENE\_M\_HesC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_HesC\_transcription

### Reaction equation



### Reactant

Table 344: Properties of each reactant.

Id	Name	SBO
GENE_M_HesC	GENE_M_HesC	

### Modifiers

Table 345: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqHesC	PROTEIN_M_UbiqHesC	
PROTEIN_M_Pmar1	PROTEIN_M_Pmar1	

## Product

Table 346: Properties of each product.

Id	Name	SBO
mRNA_M_HesC	mRNA_M_HesC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{88} = \frac{k_{\text{PROTEIN\_UbiqHesC}} \cdot [\text{PROTEIN\_M\_UbiqHesC}]}{c_{\text{PROTEIN\_UbiqHesC}} + [\text{PROTEIN\_M\_UbiqHesC}]} \cdot \frac{k_{\text{PROTEIN\_Pmar1}} \cdot c_{\text{PROTEIN\_Pmar1}}}{c_{\text{PROTEIN\_Pmar1}} + [\text{PROTEIN\_M\_Pmar1}]} \quad (288)$$

Table 347: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqHesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqHesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Pmar1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Pmar1			1.0		<input checked="" type="checkbox"/>

## 7.89 Reaction GENE\_M\_Hex\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Hex\_transcription

### Reaction equation



## Reactant

Table 348: Properties of each reactant.

Id	Name	SBO
GENE_M_Hex	GENE_M_Hex	

## Modifiers

Table 349: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Tgif	PROTEIN_M_Tgif	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Erg	PROTEIN_M_Erg	

## Product

Table 350: Properties of each product.

Id	Name	SBO
mRNA_M_Hex	mRNA_M_Hex	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{89} = \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_M\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_M\_Tgif}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]} \quad (290)$$

Table 351: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

## 7.90 Reaction GENE\_M\_Hnf6\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_Hnf6\_transcription

**Reaction equation**



**Reactant**

Table 352: Properties of each reactant.

Id	Name	SBO
GENE_M_Hnf6	GENE_M_Hnf6	

**Modifier**

Table 353: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqHnf6	PROTEIN_M_UbiqHnf6	

**Product**

Table 354: Properties of each product.

Id	Name	SBO
mRNA_M_Hnf6	mRNA_M_Hnf6	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{90} = \frac{k_{\text{PROTEIN\_UbiqHnf6}} \cdot [\text{PROTEIN\_M\_UbiqHnf6}]}{c_{\text{PROTEIN\_UbiqHnf6}} + [\text{PROTEIN\_M\_UbiqHnf6}]} \quad (292)$$

Table 355: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqHnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqHnf6			1.0		<input checked="" type="checkbox"/>

## 7.91 Reaction GENE\_M\_Hox\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_M\_Hox\_transcription

### Reaction equation



### Reactant

Table 356: Properties of each reactant.

Id	Name	SBO
GENE_M_Hox	GENE_M_Hox	

### Modifiers

Table 357: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	
PROTEIN_M_nBCF	PROTEIN_M_nBCF	
PROTEIN_M_Eve	PROTEIN_M_Eve	

Id	Name	SBO
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Product

Table 358: Properties of each product.

Id	Name	SBO
mRNA_M_Hox	mRNA_M_Hox	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{91} = \left( \frac{k_{PROTEIN\_Blimp1} \cdot [PROTEIN\_M\_Blimp1]}{c_{PROTEIN\_Blimp1} + [PROTEIN\_M\_Blimp1]} + \frac{k_{PROTEIN\_nBCF} \cdot [PROTEIN\_M\_nBCF]}{c_{PROTEIN\_nBCF} + [PROTEIN\_M\_nBCF]} \right. \right. \\ \left. \left. + \frac{k_{PROTEIN\_Eve} \cdot [PROTEIN\_M\_Eve]}{c_{PROTEIN\_Eve} + [PROTEIN\_M\_Eve]} + \frac{k_{PROTEIN\_Otx} \cdot [PROTEIN\_M\_Otx]}{c_{PROTEIN\_Otx} + [PROTEIN\_M\_Otx]} \right) \cdot \frac{k_{PROTEIN\_GroTCF} \cdot c_{PROTEIN\_GroTCF}}{c_{PROTEIN\_GroTCF} + [PROTEIN\_M\_GroTCF]} \right) \quad (294)$$

Table 359: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>

## 7.92 Reaction GENE\_M\_Kakapo\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Kakapo\_transcription

**Reaction equation**



**Reactant**

Table 360: Properties of each reactant.

Id	Name	SBO
GENE_M_Kakapo	GENE_M_Kakapo	

**Modifiers**

Table 361: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Bra	PROTEIN_M_Bra	
PROTEIN_E_Bra	PROTEIN_E_Bra	

**Product**

Table 362: Properties of each product.

Id	Name	SBO
mRNA_M_Kakapo	mRNA_M_Kakapo	

Id	Name	SBO
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## Kinetic Law

**Derived unit** contains undeclared units

$$v_{92} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_M\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_M\_Bra}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \quad (296)$$

Table 363: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>

## 7.93 Reaction GENE\_M\_Lim\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_Lim\_transcription

### Reaction equation



### Reactant

Table 364: Properties of each reactant.

Id	Name	SBO
GENE_M_Lim	GENE_M_Lim	

### Modifiers

Table 365: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	

Id	Name	SBO
PROTEIN_M_Otx	PROTEIN_M_Otx	

## Product

Table 366: Properties of each product.

Id	Name	SBO
mRNA_M_Lim	mRNA_M_Lim	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{93} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_M\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_M\_Otx}]} \quad (298)$$

Table 367: Properties of each parameter.

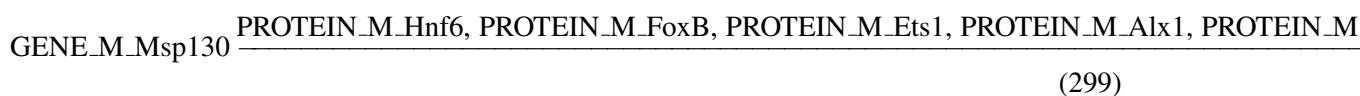
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.94 Reaction GENE\_M\_Msp130\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_M\_Msp130\_transcription

### Reaction equation



## Reactant

Table 368: Properties of each reactant.

Id	Name	SBO
GENE_M_Msp130	GENE_M_Msp130	

## Modifiers

Table 369: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	
PROTEIN_M_FoxB	PROTEIN_M_FoxB	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_Hex	PROTEIN_M_Hex	
PROTEIN_M_TBr	PROTEIN_M_TBr	
PROTEIN_M_Erg	PROTEIN_M_Erg	

## Product

Table 370: Properties of each product.

Id	Name	SBO
mRNA_M_Msp130	mRNA_M_Msp130	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{94} = \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_M\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_M\_Hnf6}]} + \frac{k_{\text{PROTEIN\_FoxB}} \cdot [\text{PROTEIN\_M\_FoxB}]}{c_{\text{PROTEIN\_FoxB}} + [\text{PROTEIN\_M\_FoxB}]} \\ + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \\ + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} \\ + \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_M\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_M\_TBr}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]} \quad (300)$$

Table 371: Properties of each parameter.

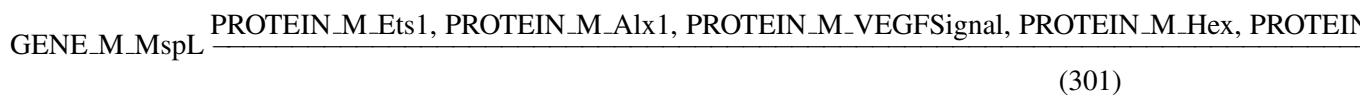
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.95 Reaction GENE\_M\_MspL\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_M\_MspL\_transcription

#### Reaction equation



## Reactant

Table 372: Properties of each reactant.

Id	Name	SBO
GENE_M_MspL	GENE_M_MspL	

## Modifiers

Table 373: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_VEGFSignal	PROTEIN_M_VEGFSignal	
PROTEIN_M_Hex	PROTEIN_M_Hex	
PROTEIN_M_Erg	PROTEIN_M_Erg	

## Product

Table 374: Properties of each product.

Id	Name	SBO
mRNA_M_MspL	mRNA_M_MspL	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{95} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} \\ + \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_M\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_M\_VEGFSignal}]} \\ + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]} \quad (302)$$

Table 375: Properties of each parameter.

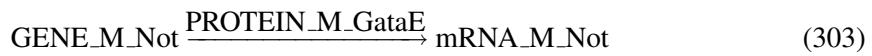
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>

## 7.96 Reaction GENE\_M\_Not\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_Not\_transcription

### Reaction equation



### Reactant

Table 376: Properties of each reactant.

Id	Name	SBO
GENE_M_Not	GENE_M_Not	

### Modifier

Table 377: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	

## Product

Table 378: Properties of each product.

Id	Name	SBO
mRNA_M_Not	mRNA_M_Not	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{96} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \quad (304)$$

Table 379: Properties of each parameter.

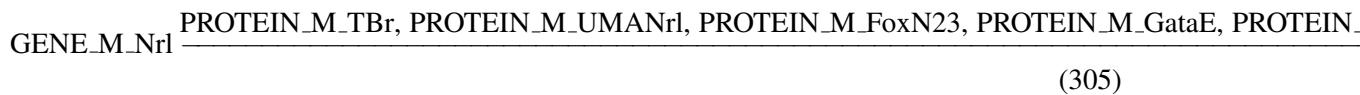
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					

## 7.97 Reaction GENE\_M\_Nrl\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_M\_Nrl\_transcription

### Reaction equation



## Reactant

Table 380: Properties of each reactant.

Id	Name	SBO
GENE_M_Nrl	GENE_M_Nrl	

## Modifiers

Table 381: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_TBr	PROTEIN_M_TBr	
PROTEIN_M_UMANrl	PROTEIN_M_UMANrl	
PROTEIN_M_FoxN23	PROTEIN_M_FoxN23	
PROTEIN_M_GataE	PROTEIN_M_GataE	
PROTEIN_M_HesC	PROTEIN_M_HesC	
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_M_Tgif	PROTEIN_M_Tgif	

## Product

Table 382: Properties of each product.

Id	Name	SBO
mRNA_M_Nrl	mRNA_M_Nrl	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{97} = & \left( \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_M\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_M\_TBr}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_UMANrl}} \cdot [\text{PROTEIN\_M\_UMANrl}]}{c_{\text{PROTEIN\_UMANrl}} + [\text{PROTEIN\_M\_UMANrl}]} \\
 & + \left. \frac{k_{\text{PROTEIN\_FoxN23}} \cdot [\text{PROTEIN\_M\_FoxN23}]}{c_{\text{PROTEIN\_FoxN23}} + [\text{PROTEIN\_M\_FoxN23}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_GataE}} \cdot c_{\text{PROTEIN\_GataE}}}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_Bra}} \cdot c_{\text{PROTEIN\_Bra}}}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \cdot \frac{k_{\text{PROTEIN\_Tgif}} \cdot c_{\text{PROTEIN\_Tgif}}}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_M\_Tgif}]}
 \end{aligned} \tag{306}$$

Table 383: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UMANrl			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UMANrl			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_FoxN23			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxN23			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

### 7.98 Reaction GENE\_M\_OrCt\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_OrCt\_transcription

#### Reaction equation



## Reactant

Table 384: Properties of each reactant.

Id	Name	SBO
GENE_M_OrCt	GENE_M_OrCt	

## Modifiers

Table 385: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Bra	PROTEIN_M_Bra	
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_M_Hox	PROTEIN_M_Hox	

## Product

Table 386: Properties of each product.

Id	Name	SBO
mRNA_M_OrCt	mRNA_M_OrCt	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{98} = \left( \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_M\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_M\_Bra}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} \right) \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_M\_Hox}]} \quad (308)$$

Table 387: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>

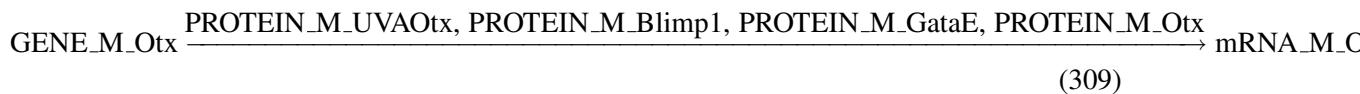
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>

## 7.99 Reaction GENE\_M\_Otx\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_Otx\_transcription

### Reaction equation



### Reactant

Table 388: Properties of each reactant.

Id	Name	SBO
GENE_M_Otx	GENE_M_Otx	

### Modifiers

Table 389: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UVAOtx	PROTEIN_M_UVAOtx	
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	
PROTEIN_M_GataE	PROTEIN_M_GataE	
PROTEIN_M_Otx	PROTEIN_M_Otx	

### Product

Table 390: Properties of each product.

Id	Name	SBO
mRNA_M_Otx	mRNA_M_Otx	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{99} = \frac{k_{\text{PROTEIN\_UVAOtx}} \cdot [\text{PROTEIN\_M\_UVAOtx}]}{c_{\text{PROTEIN\_UVAOtx}} + [\text{PROTEIN\_M\_UVAOtx}]} + \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_M\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_M\_Blimp1}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_M\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_M\_Otx}]} \quad (310)$$

Table 391: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
<code>k_PROTEIN-UVAOtx</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-UVAOtx</code>			1.0		<input checked="" type="checkbox"/>
<code>k_PROTEIN-Otx</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-Otx</code>			1.0		<input checked="" type="checkbox"/>
<code>k_PROTEIN-GataE</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-GataE</code>			1.0		<input checked="" type="checkbox"/>
<code>k_PROTEIN-Blimp1</code>			1.0		<input checked="" type="checkbox"/>
<code>c_PROTEIN-Blimp1</code>			1.0		<input checked="" type="checkbox"/>

## 7.100 Reaction GENE\_M\_Pks\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Pks\_transcription

## Reaction equation



## Reactant

Table 392: Properties of each reactant.

Id	Name	SBO
GENE_M_Pks	GENE_M_Pks	

## Modifiers

Table 393: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	
PROTEIN_M_Gcm	PROTEIN_M_Gcm	
PROTEIN_M_GataE	PROTEIN_M_GataE	

## Product

Table 394: Properties of each product.

Id	Name	SBO
mRNA_M_Pks	mRNA_M_Pks	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{100} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_E\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_E\_Bra}]} + \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_M\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_M\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \quad (312)$$

Table 395: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

### 7.101 Reaction GENE\_M\_Pmar1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Pmar1\_transcription

#### Reaction equation



#### Reactant

Table 396: Properties of each reactant.

Id	Name	SBO
GENE_M_Pmar1	GENE_M_Pmar1	

#### Modifiers

Table 397: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_nTCF	PROTEIN_M_nTCF	
PROTEIN_M_Otx	PROTEIN_M_Otx	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Product

Table 398: Properties of each product.

Id	Name	SBO
mRNA_M_Pmar1	mRNA_M_Pmar1	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{101} = \left( \frac{k_{PROTEIN\_nTCF} \cdot [PROTEIN\_M\_nTCF]}{c_{PROTEIN\_nTCF} + [PROTEIN\_M\_nTCF]} \right. \\ \left. + \frac{k_{PROTEIN\_Otx} \cdot [PROTEIN\_M\_Otx]}{c_{PROTEIN\_Otx} + [PROTEIN\_M\_Otx]} \right) \cdot \frac{k_{PROTEIN\_GroTCF} \cdot c_{PROTEIN\_GroTCF}}{c_{PROTEIN\_GroTCF} + [PROTEIN\_M\_GroTCF]} \quad (314)$$

Table 399: Properties of each parameter.

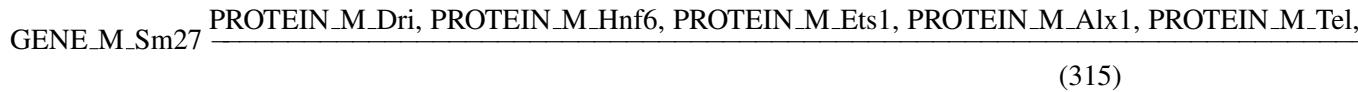
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTCF					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTCF					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Otx					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Otx					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_nTCF					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_nTCF					

## 7.102 Reaction GENE\_M\_Sm27\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_M\_Sm27\_transcription

## Reaction equation



## Reactant

Table 400: Properties of each reactant.

Id	Name	SBO
GENE_M_Sm27	GENE_M_Sm27	

## Modifiers

Table 401: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Dri	PROTEIN_M_Dri	
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_Tel	PROTEIN_M_Tel	
PROTEIN_M_Hex	PROTEIN_M_Hex	
PROTEIN_M_Erg	PROTEIN_M_Erg	

## Product

Table 402: Properties of each product.

Id	Name	SBO
mRNA_M_Sm27	mRNA_M_Sm27	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{102} = & \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_M\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_M\_Dri}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_M\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_M\_Hnf6}]} \\
& + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \\
& + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} + \frac{k_{\text{PROTEIN\_Tel}} \cdot [\text{PROTEIN\_M\_Tel}]}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_M\_Tel}]} \\
& + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]}
\end{aligned} \tag{316}$$

Table 403: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.103 Reaction GENE\_M\_Sm30\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_Sm30\_transcription

### Reaction equation



### Reactant

Table 404: Properties of each reactant.

Id	Name	SBO
GENE_M_Sm30	GENE_M_Sm30	

### Modifier

Table 405: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_VEGFSignal	PROTEIN_M_VEGFSignal	

### Product

Table 406: Properties of each product.

Id	Name	SBO
mRNA_M_Sm30	mRNA_M_Sm30	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{103} = \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_M\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_M\_VEGFSignal}]} \quad (318)$$

Table 407: Properties of each parameter.

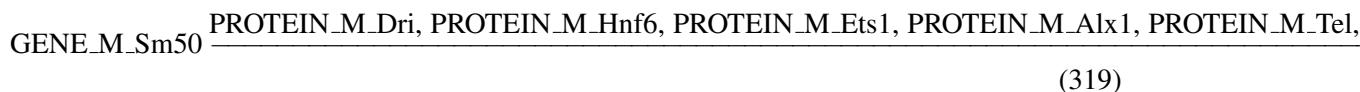
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>

### 7.104 Reaction GENE\_M\_Sm50\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by eight modifiers.

**Name** GENE\_M\_Sm50\_transcription

#### Reaction equation



#### Reactant

Table 408: Properties of each reactant.

Id	Name	SBO
GENE_M_Sm50	GENE_M_Sm50	

#### Modifiers

Table 409: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Dri	PROTEIN_M_Dri	
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_Tel	PROTEIN_M_Tel	
PROTEIN_M_Hex	PROTEIN_M_Hex	
PROTEIN_M_Erg	PROTEIN_M_Erg	
PROTEIN_M_VEGFSignal	PROTEIN_M_VEGFSignal	

#### Product

Table 410: Properties of each product.

Id	Name	SBO
mRNA_M_Sm50	mRNA_M_Sm50	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{104} = & \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_M\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_M\_Dri}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_M\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_M\_Hnf6}]} \\
 & + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \\
 & + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} + \frac{k_{\text{PROTEIN\_Tel}} \cdot [\text{PROTEIN\_M\_Tel}]}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_M\_Tel}]} \\
 & + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]} \\
 & + \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_M\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_M\_VEGFSignal}]}
 \end{aligned} \tag{320}$$

Table 411: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>

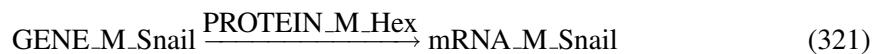
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.105 Reaction GENE\_M\_Snail\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_M\_Snail\_transcription

**Reaction equation**



**Reactant**

Table 412: Properties of each reactant.

Id	Name	SBO
GENE_M_Snail	GENE_M_Snail	

**Modifier**

Table 413: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Hex	PROTEIN_M_Hex	

**Product**

Table 414: Properties of each product.

Id	Name	SBO
mRNA_M_Snail	mRNA_M_Snail	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{105} = \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} \quad (322)$$

Table 415: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>

### 7.106 Reaction GENE\_M\_SoxB1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_SoxB1\_transcription

#### Reaction equation



#### Reactant

Table 416: Properties of each reactant.

Id	Name	SBO
GENE_M_SoxB1	GENE_M_SoxB1	

#### Modifiers

Table 417: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqSoxB1	PROTEIN_M_UbiqSoxB1	
PROTEIN_M_SoxB1	PROTEIN_M_SoxB1	

## Product

Table 418: Properties of each product.

Id	Name	SBO
mRNA_M_SoxB1	mRNA_M_SoxB1	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{106} = \frac{k_{\text{PROTEIN\_UbiqSoxB1}} \cdot [\text{PROTEIN\_M\_UbiqSoxB1}]}{c_{\text{PROTEIN\_UbiqSoxB1}} + [\text{PROTEIN\_M\_UbiqSoxB1}]} \cdot \frac{k_{\text{PROTEIN\_SoxB1}} \cdot c_{\text{PROTEIN\_SoxB1}}}{c_{\text{PROTEIN\_SoxB1}} + [\text{PROTEIN\_M\_SoxB1}]} \quad (324)$$

Table 419: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqSoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqSoxB1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-SoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-SoxB1			1.0		<input checked="" type="checkbox"/>

## 7.107 Reaction GENE\_M\_SoxC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_SoxC\_transcription

## Reaction equation



## Reactant

Table 420: Properties of each reactant.

Id	Name	SBO
GENE_M_SoxC	GENE_M_SoxC	

## Modifiers

Table 421: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqSoxC	PROTEIN_M_UbiqSoxC	
PROTEIN_M_HesC	PROTEIN_M_HesC	
PROTEIN_M_SoxC	PROTEIN_M_SoxC	

## Product

Table 422: Properties of each product.

Id	Name	SBO
mRNA_M_SoxC	mRNA_M_SoxC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{107} = \frac{k_{\text{PROTEIN\_UbiqSoxC}} \cdot [\text{PROTEIN\_M\_UbiqSoxC}]}{c_{\text{PROTEIN\_UbiqSoxC}} + [\text{PROTEIN\_M\_UbiqSoxC}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \cdot \frac{k_{\text{PROTEIN\_SoxC}} \cdot c_{\text{PROTEIN\_SoxC}}}{c_{\text{PROTEIN\_SoxC}} + [\text{PROTEIN\_M\_SoxC}]} \quad (326)$$

Table 423: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_SoxC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SoxC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqSoxC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqSoxC			1.0		<input checked="" type="checkbox"/>

### 7.108 Reaction GENE\_M\_SuTx\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_M\_SuTx\_transcription

#### Reaction equation



#### Reactant

Table 424: Properties of each reactant.

Id	Name	SBO
GENE_M_SuTx	GENE_M_SuTx	

#### Modifiers

Table 425: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Gcm	PROTEIN_M_Gcm	
PROTEIN_M_GataE	PROTEIN_M_GataE	

## Product

Table 426: Properties of each product.

Id	Name	SBO
mRNA_M_SuTx	mRNA_M_SuTx	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{108} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_M\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_M\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_M\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_M\_GataE}]} \quad (328)$$

Table 427: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

## 7.109 Reaction GENE\_M\_TBr\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_TBr\_transcription

### Reaction equation



## Reactant

Table 428: Properties of each reactant.

Id	Name	SBO
GENE_M_TBr	GENE_M_TBr	

## Modifiers

Table 429: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_HesC	PROTEIN_M_HesC	
PROTEIN_M_TBr	PROTEIN_M_TBr	

## Product

Table 430: Properties of each product.

Id	Name	SBO
mRNA_M_TBr	mRNA_M_TBr	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{109} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \\ \cdot \frac{k_{\text{PROTEIN\_TBr}} \cdot c_{\text{PROTEIN\_TBr}}}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_M\_TBr}]} \quad (330)$$

Table 431: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>

## 7.110 Reaction GENE\_M\_Tel\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Tel\_transcription

### Reaction equation



### Reactant

Table 432: Properties of each reactant.

Id	Name	SBO
GENE_M_Tel	GENE_M_Tel	

### Modifiers

Table 433: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_UbiqTel	PROTEIN_M_UbiqTel	
PROTEIN_M_Tel	PROTEIN_M_Tel	
PROTEIN_M_HesC	PROTEIN_M_HesC	

### Product

Table 434: Properties of each product.

Id	Name	SBO
mRNA_M_Tel	mRNA_M_Tel	

Id	Name	SBO
----	------	-----

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{110} = \frac{k_{\text{PROTEIN\_UbiqTel}} \cdot [\text{PROTEIN\_M\_UbiqTel}]}{c_{\text{PROTEIN\_UbiqTel}} + [\text{PROTEIN\_M\_UbiqTel}]} \cdot \frac{k_{\text{PROTEIN\_Tel}} \cdot c_{\text{PROTEIN\_Tel}}}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_M\_Tel}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_M\_HesC}]} \quad (332)$$

Table 435: Properties of each parameter.

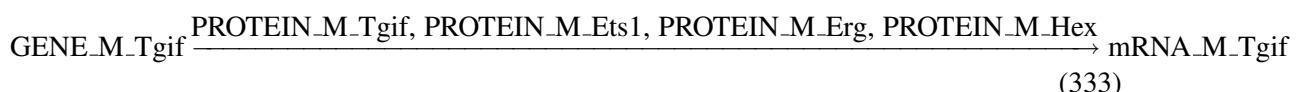
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_UbiqTel					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_UbiqTel					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Tel					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Tel					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_HesC					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_HesC					

## 7.111 Reaction GENE\_M\_Tgif\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_Tgif\_transcription

### Reaction equation



### Reactant

Table 436: Properties of each reactant.

Id	Name	SBO
GENE_M_Tgif	GENE_M_Tgif	

## Modifiers

Table 437: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Tgif	PROTEIN_M_Tgif	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Erg	PROTEIN_M_Erg	
PROTEIN_M_Hex	PROTEIN_M_Hex	

## Product

Table 438: Properties of each product.

Id	Name	SBO
mRNA_M_Tgif	mRNA_M_Tgif	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{111} = \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_M\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_M\_Tgif}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} \\ + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_M\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_M\_Erg}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} \quad (334)$$

Table 439: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>

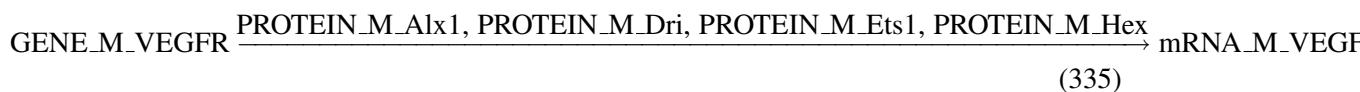
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>

## 7.112 Reaction GENE\_M\_VEGFR\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_M\_VEGFR\_transcription

**Reaction equation**



**Reactant**

Table 440: Properties of each reactant.

Id	Name	SBO
GENE_M_VEGFR	GENE_M_VEGFR	

**Modifiers**

Table 441: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Alx1	PROTEIN_M_Alx1	
PROTEIN_M_Dri	PROTEIN_M_Dri	
PROTEIN_M_Ets1	PROTEIN_M_Ets1	
PROTEIN_M_Hex	PROTEIN_M_Hex	

**Product**

Table 442: Properties of each product.

Id	Name	SBO
mRNA_M_VEGFR	mRNA_M_VEGFR	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{112} = \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_M\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_M\_Alx1}]} + \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_M\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_M\_Dri}]} \\ + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_M\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_M\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_M\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_M\_Hex}]} \quad (336)$$

Table 443: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>

### 7.113 Reaction GENE\_M\_Wnt8\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_Wnt8\_transcription

## Reaction equation



## Reactant

Table 444: Properties of each reactant.

Id	Name	SBO
GENE_M_Wnt8	GENE_M_Wnt8	

## Modifiers

Table 445: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_nTCF	PROTEIN_M_nTCF	
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Product

Table 446: Properties of each product.

Id	Name	SBO
mRNA_M_Wnt8	mRNA_M_Wnt8	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{113} = \left( \frac{k_{\text{PROTEIN\_nTCF}} \cdot [\text{PROTEIN\_M\_nTCF}]}{c_{\text{PROTEIN\_nTCF}} + [\text{PROTEIN\_M\_nTCF}]} + \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_M\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_M\_Blimp1}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_M\_GroTCF}]} \quad (338)$$

Table 447: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBCF			1.0		<input checked="" type="checkbox"/>

### 7.114 Reaction GENE\_M\_z13\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_M\_z13\_transcription

#### Reaction equation



#### Reactant

Table 448: Properties of each reactant.

Id	Name	SBO
GENE_M_z13	GENE_M_z13	

#### Modifiers

Table 449: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_nBCF	PROTEIN_M_nBCF	
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	

## Product

Table 450: Properties of each product.

Id	Name	SBO
mRNA_M_z13	mRNA_M_z13	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{114} = \frac{k_{\text{PROTEIN\_nBTF}} \cdot [\text{PROTEIN\_M\_nBTF}]}{c_{\text{PROTEIN\_nBTF}} + [\text{PROTEIN\_M\_nBTF}]} \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_M\_GroTCF}]} \cdot \frac{k_{\text{PROTEIN\_Hnf6}} \cdot c_{\text{PROTEIN\_Hnf6}}}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_M\_Hnf6}]} \quad (340)$$

Table 451: Properties of each parameter.

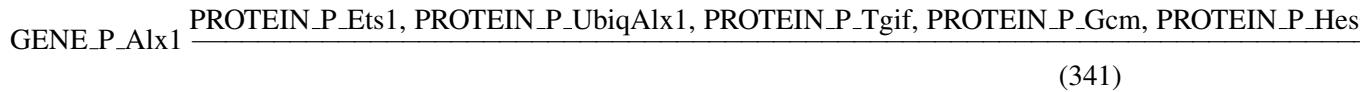
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.115 Reaction GENE\_P\_Alx1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_P\_Alx1\_transcription

### Reaction equation



### Reactant

Table 452: Properties of each reactant.

Id	Name	SBO
GENE_P_Alx1	GENE_P_Alx1	

### Modifiers

Table 453: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_UbiqAlx1	PROTEIN_P_UbiqAlx1	
PROTEIN_P_Tgif	PROTEIN_P_Tgif	
PROTEIN_P_Gcm	PROTEIN_P_Gcm	
PROTEIN_P_HesC	PROTEIN_P_HesC	

### Product

Table 454: Properties of each product.

Id	Name	SBO
mRNA_P_Alx1	mRNA_P_Alx1	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{115} = & \left( \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \right. \\
& + \frac{k_{\text{PROTEIN\_UbiqAlx1}} \cdot [\text{PROTEIN\_P\_UbiqAlx1}]}{c_{\text{PROTEIN\_UbiqAlx1}} + [\text{PROTEIN\_P\_UbiqAlx1}]} \\
& + \left. \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_P\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_P\_Tgif}]} \right) \\
& \cdot \frac{k_{\text{PROTEIN\_Gcm}} \cdot c_{\text{PROTEIN\_Gcm}}}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_P\_Gcm}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \quad (342)
\end{aligned}$$

Table 455: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqAlx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqAlx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Gcm			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>

## 7.116 Reaction GENE\_P\_Apobec\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Apobec\_transcription

### Reaction equation



## Reactant

Table 456: Properties of each reactant.

Id	Name	SBO
GENE_P_Apobec	GENE_P_Apobec	

## Modifiers

Table 457: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Bra	PROTEIN_P_Bra	
PROTEIN_P_Hox	PROTEIN_P_Hox	

## Product

Table 458: Properties of each product.

Id	Name	SBO
mRNA_P_Apobec	mRNA_P_Apobec	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{116} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_P\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_P\_Bra}]} \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_P\_Hox}]} \quad (344)$$

Table 459: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>

## 7.117 Reaction GENE\_P\_Blimp1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_P\_Blimp1\_transcription

### Reaction equation



### Reactant

Table 460: Properties of each reactant.

Id	Name	SBO
GENE_P_Blimp1	GENE_P_Blimp1	

### Modifiers

Table 461: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_Brn	PROTEIN_P_Brn	
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_nBTcf	PROTEIN_P_nBTcf	
PROTEIN_P_Eve	PROTEIN_P_Eve	
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

### Product

Table 462: Properties of each product.

Id	Name	SBO
mRNA_P_Blimp1	mRNA_P_Blimp1	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{117} = & \left( \frac{k_{PROTEIN\_Otx} \cdot [PROTEIN\_P\_Otx]}{c_{PROTEIN\_Otx} + [PROTEIN\_P\_Otx]} + \frac{k_{PROTEIN\_Brn} \cdot [PROTEIN\_P\_Brn]}{c_{PROTEIN\_Brn} + [PROTEIN\_P\_Brn]} \right. \\
& + \frac{k_{PROTEIN\_GataE} \cdot [PROTEIN\_P\_GataE]}{c_{PROTEIN\_GataE} + [PROTEIN\_P\_GataE]} \\
& + \frac{k_{PROTEIN\_nBCF} \cdot [PROTEIN\_P\_nBCF]}{c_{PROTEIN\_nBCF} + [PROTEIN\_P\_nBCF]} \\
& \left. + \frac{k_{PROTEIN\_Eve} \cdot [PROTEIN\_P\_Eve]}{c_{PROTEIN\_Eve} + [PROTEIN\_P\_Eve]} \right) \\
& \cdot \frac{k_{PROTEIN\_Blimp1} \cdot c_{PROTEIN\_Blimp1}}{c_{PROTEIN\_Blimp1} + [PROTEIN\_P\_Blimp1]} \\
& \cdot \frac{k_{PROTEIN\_GroTCF} \cdot c_{PROTEIN\_GroTCF}}{c_{PROTEIN\_GroTCF} + [PROTEIN\_P\_GroTCF]}
\end{aligned} \tag{346}$$

Table 463: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Brn			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Brn			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-GataE			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

### 7.118 Reaction GENE\_P\_Bra\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_Bra\_transcription

#### Reaction equation



#### Reactant

Table 464: Properties of each reactant.

Id	Name	SBO
GENE_P_Bra	GENE_P_Bra	

#### Modifiers

Table 465: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_nBTCF	PROTEIN_P_nBTCF	
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

#### Product

Table 466: Properties of each product.

Id	Name	SBO
mRNA_P_Bra	mRNA_P_Bra	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{118} = \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_nBTcf}} \cdot [\text{PROTEIN\_P\_nBTcf}]}{c_{\text{PROTEIN\_nBTcf}} + [\text{PROTEIN\_P\_nBTcf}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_P\_GroTCF}]} \quad (348)$$

Table 467: Properties of each parameter.

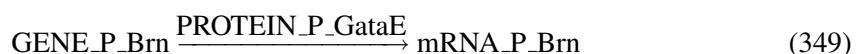
Id	Name	SBO	Value	Unit	Constant
<code>k_PROTEIN-GroTCF</code>	1.0	<input checked="" type="checkbox"/>			
<code>c_PROTEIN-GroTCF</code>	1.0	<input checked="" type="checkbox"/>			
<code>k_PROTEIN-Otx</code>	1.0	<input checked="" type="checkbox"/>			
<code>c_PROTEIN-Otx</code>	1.0	<input checked="" type="checkbox"/>			
<code>k_PROTEIN-GataE</code>	1.0	<input checked="" type="checkbox"/>			
<code>c_PROTEIN-GataE</code>	1.0	<input checked="" type="checkbox"/>			
<code>k_PROTEIN-nBTcf</code>	1.0	<input checked="" type="checkbox"/>			
<code>c_PROTEIN-nBTcf</code>	1.0	<input checked="" type="checkbox"/>			

## 7.119 Reaction GENE\_P\_Brn\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Brn\_transcription

### Reaction equation



## Reactant

Table 468: Properties of each reactant.

Id	Name	SBO
GENE_P_Brn	GENE_P_Brn	

## Modifier

Table 469: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	

## Product

Table 470: Properties of each product.

Id	Name	SBO
mRNA_P_Brn	mRNA_P_Brn	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{119} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \quad (350)$$

Table 471: Properties of each parameter.

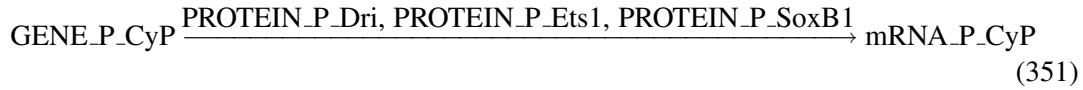
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					

## 7.120 Reaction GENE\_P\_CyP\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_CyP\_transcription

**Reaction equation**



**Reactant**

Table 472: Properties of each reactant.

Id	Name	SBO
GENE_P_CyP	GENE_P_CyP	

**Modifiers**

Table 473: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Dri	PROTEIN_P_Dri	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_SoxB1	PROTEIN_P_SoxB1	

**Product**

Table 474: Properties of each product.

Id	Name	SBO
mRNA_P_CyP	mRNA_P_CyP	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{120} = \left( \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_P\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_P\_Dri}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \right) \cdot \frac{k_{\text{PROTEIN\_SoxB1}} \cdot c_{\text{PROTEIN\_SoxB1}}}{c_{\text{PROTEIN\_SoxB1}} + [\text{PROTEIN\_P\_SoxB1}]} \quad (352)$$

Table 475: Properties of each parameter.

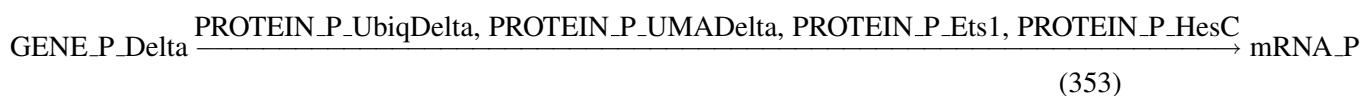
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SoxB1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SoxB1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>

### 7.121 Reaction GENE\_P\_Delta\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_Delta\_transcription

#### Reaction equation



#### Reactant

Table 476: Properties of each reactant.

Id	Name	SBO
GENE_P_Delta	GENE_P_Delta	

#### Modifiers

Table 477: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqDelta	PROTEIN_P_UbiqDelta	
PROTEIN_P_UMADelta	PROTEIN_P_UMADelta	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	

Id	Name	SBO
PROTEIN_P_HesC	PROTEIN_P_HesC	

## Product

Table 478: Properties of each product.

Id	Name	SBO
mRNA_P_Delta	mRNA_P_Delta	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{121} = \left( \frac{k_{\text{PROTEIN\_UbiqDelta}} \cdot [\text{PROTEIN\_P\_UbiqDelta}]}{c_{\text{PROTEIN\_UbiqDelta}} + [\text{PROTEIN\_P\_UbiqDelta}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_UMADelta}} \cdot [\text{PROTEIN\_P\_UMADelta}]}{c_{\text{PROTEIN\_UMADelta}} + [\text{PROTEIN\_P\_UMADelta}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \quad (354)$$

Table 479: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqDelta			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqDelta			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UMADelta			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_UMADelta			1.0		<input checked="" type="checkbox"/>

## 7.122 Reaction GENE\_P\_Dpt\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Dpt\_transcription

### Reaction equation



### Reactant

Table 480: Properties of each reactant.

Id	Name	SBO
GENE_P_Dpt	GENE_P_Dpt	

### Modifier

Table 481: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Gcm	PROTEIN_P_Gcm	

### Product

Table 482: Properties of each product.

Id	Name	SBO
mRNA_P_Dpt	mRNA_P_Dpt	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{122} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_P\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_P\_Gcm}]} \quad (356)$$

Table 483: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

### 7.123 Reaction GENE\_P\_Dri\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Dri\_transcription

#### Reaction equation



#### Reactant

Table 484: Properties of each reactant.

Id	Name	SBO
GENE_P_Dri	GENE_P_Dri	

#### Modifiers

Table 485: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	

#### Product

Table 486: Properties of each product.

Id	Name	SBO
mRNA_P_Dri	mRNA_P_Dri	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{123} = \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_P\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_P\_Alx1}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \quad (358)$$

Table 487: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Alx1					

## 7.124 Reaction GENE\_P\_Endo16\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Endo16\_transcription

### Reaction equation



### Reactant

Table 488: Properties of each reactant.

Id	Name	SBO
GENE_P_Endo16	GENE_P_Endo16	

### Modifiers

Table 489: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_Brn	PROTEIN_P_Brn	

## Product

Table 490: Properties of each product.

Id	Name	SBO
mRNA_P_Endo16	mRNA_P_Endo16	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{124} = \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]} + \frac{k_{\text{PROTEIN\_Brn}} \cdot [\text{PROTEIN\_P\_Brn}]}{c_{\text{PROTEIN\_Brn}} + [\text{PROTEIN\_P\_Brn}]} \quad (360)$$

Table 491: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Brn			1.0		<input checked="" type="checkbox"/>

## 7.125 Reaction GENE\_P\_Erg\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_Erg\_transcription

### Reaction equation



## Reactant

Table 492: Properties of each reactant.

Id	Name	SBO
GENE_P_Erg	GENE_P_Erg	

## Modifiers

Table 493: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_TBr	PROTEIN_P_TBr	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Hex	PROTEIN_P_Hex	

## Product

Table 494: Properties of each product.

Id	Name	SBO
mRNA_P_Erg	mRNA_P_Erg	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{125} = \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_P\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_P\_TBr}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_P\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_P\_Hex}]} \quad (362)$$

Table 495: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-TBr			1.0		<input checked="" type="checkbox"/>

## 7.126 Reaction GENE\_P\_Ets1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Ets1\_transcription

**Reaction equation**



**Reactant**

Table 496: Properties of each reactant.

Id	Name	SBO
GENE_P_Ets1	GENE_P_Ets1	

**Modifiers**

Table 497: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqEts1	PROTEIN_P_UbiqEts1	
PROTEIN_P_HesC	PROTEIN_P_HesC	

**Product**

Table 498: Properties of each product.

Id	Name	SBO
mRNA_P_Ets1	mRNA_P_Ets1	

Id	Name	SBO
----	------	-----

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{126} = \frac{k_{\text{PROTEIN\_UbiqEts1}} \cdot [\text{PROTEIN\_P\_UbiqEts1}]}{c_{\text{PROTEIN\_UbiqEts1}} + [\text{PROTEIN\_P\_UbiqEts1}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \quad (364)$$

Table 499: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_UbiqEts1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_UbiqEts1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_HesC			1.0		<input checked="" type="checkbox"/>

## 7.127 Reaction GENE\_P\_Eve\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_Eve\_transcription

### Reaction equation



### Reactant

Table 500: Properties of each reactant.

Id	Name	SBO
GENE_P_Eve	GENE_P_Eve	

## Modifiers

Table 501: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	
PROTEIN_P_nTCF	PROTEIN_P_nTCF	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	
PROTEIN_P_Hox	PROTEIN_P_Hox	

## Product

Table 502: Properties of each product.

Id	Name	SBO
mRNA_P_Eve	mRNA_P_Eve	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{127} = \left( \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_P\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_P\_Blimp1}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_nTCF}} \cdot [\text{PROTEIN\_P\_nTCF}]}{c_{\text{PROTEIN\_nTCF}} + [\text{PROTEIN\_P\_nTCF}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_P\_GroTCF}]} \\ \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_P\_Hox}]} \quad (366)$$

Table 503: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTCF					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GroTCF					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Blimp1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Blimp1					

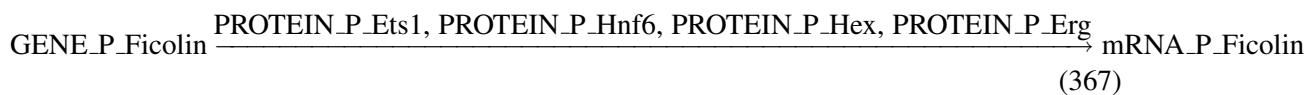
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_nBTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>

## 7.128 Reaction GENE\_P\_Ficolin\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_Ficolin\_transcription

**Reaction equation**



**Reactant**

Table 504: Properties of each reactant.

Id	Name	SBO
GENE_P_Ficolin	GENE_P_Ficolin	

**Modifiers**

Table 505: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	
PROTEIN_P_Hex	PROTEIN_P_Hex	
PROTEIN_P_Erg	PROTEIN_P_Erg	

**Product**

Table 506: Properties of each product.

Id	Name	SBO
mRNA_P_Ficolin	mRNA_P_Ficolin	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{128} = \frac{k_{PROTEIN\_Ets1} \cdot [PROTEIN\_P\_Ets1]}{c_{PROTEIN\_Ets1} + [PROTEIN\_P\_Ets1]} + \frac{k_{PROTEIN\_Hnf6} \cdot [PROTEIN\_P\_Hnf6]}{c_{PROTEIN\_Hnf6} + [PROTEIN\_P\_Hnf6]} \\ + \frac{k_{PROTEIN\_Hex} \cdot [PROTEIN\_P\_Hex]}{c_{PROTEIN\_Hex} + [PROTEIN\_P\_Hex]} + \frac{k_{PROTEIN\_Erg} \cdot [PROTEIN\_P\_Erg]}{c_{PROTEIN\_Erg} + [PROTEIN\_P\_Erg]} \quad (368)$$

Table 507: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Erg					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Erg					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hnf6					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hnf6					

### 7.129 Reaction GENE\_P\_FoxA\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_P\_FoxA\_transcription

## Reaction equation



## Reactant

Table 508: Properties of each reactant.

Id	Name	SBO
GENE_P_FoxA	GENE_P_FoxA	

## Modifiers

Table 509: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_nBCF	PROTEIN_P_nBCF	
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_Bra	PROTEIN_P_Bra	
PROTEIN_P_Tgif	PROTEIN_P_Tgif	
PROTEIN_P_GroTFC	PROTEIN_P_GroTFC	
PROTEIN_P_FoxA	PROTEIN_P_FoxA	

## Product

Table 510: Properties of each product.

Id	Name	SBO
mRNA_P_FoxA	mRNA_P_FoxA	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{129} = & \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \right. \\
& + \frac{k_{\text{PROTEIN\_nBTF}} \cdot [\text{PROTEIN\_P\_nBTF}]}{c_{\text{PROTEIN\_nBTF}} + [\text{PROTEIN\_P\_nBTF}]} \\
& + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]} + \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_P\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_P\_Bra}]} \\
& \left. + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_P\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_P\_Tgif}]} \right) \\
& \cdot \frac{k_{\text{PROTEIN\_GroTFC}} \cdot c_{\text{PROTEIN\_GroTFC}}}{c_{\text{PROTEIN\_GroTFC}} + [\text{PROTEIN\_P\_GroTFC}]} \\
& \cdot \frac{k_{\text{PROTEIN\_FoxA}} \cdot c_{\text{PROTEIN\_FoxA}}}{c_{\text{PROTEIN\_FoxA}} + [\text{PROTEIN\_P\_FoxA}]}
\end{aligned} \tag{370}$$

Table 511: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTFC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTFC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-FoxA			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-FoxA			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Tgif			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-GataE			1.0		<input checked="" type="checkbox"/>

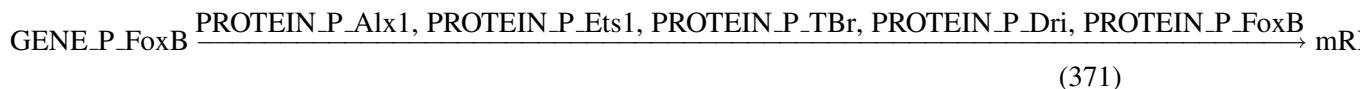
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

### 7.130 Reaction GENE\_P\_FoxB\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_P\_FoxB\_transcription

#### Reaction equation



#### Reactant

Table 512: Properties of each reactant.

Id	Name	SBO
GENE_P_FoxB	GENE_P_FoxB	

#### Modifiers

Table 513: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_TBr	PROTEIN_P_TBr	
PROTEIN_P_Dri	PROTEIN_P_Dri	
PROTEIN_P_FoxB	PROTEIN_P_FoxB	

#### Product

Table 514: Properties of each product.

Id	Name	SBO
mRNA_P_FoxB	mRNA_P_FoxB	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{130} = \left( \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_P\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_P\_Alx1}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_P\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_P\_TBr}]} + \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_P\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_P\_Dri}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_FoxB}} \cdot c_{\text{PROTEIN\_FoxB}}}{c_{\text{PROTEIN\_FoxB}} + [\text{PROTEIN\_P\_FoxB}]} \quad (372)$$

Table 515: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>

### 7.131 Reaction GENE\_P\_FoxN23\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_FoxN23\_transcription

## Reaction equation



## Reactant

Table 516: Properties of each reactant.

Id	Name	SBO
GENE_P_FoxN23	GENE_P_FoxN23	

## Modifier

Table 517: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_nBTcf	PROTEIN_P_nBTcf	

## Product

Table 518: Properties of each product.

Id	Name	SBO
mRNA_P_FoxN23	mRNA_P_FoxN23	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{131} = \frac{k_{\text{PROTEIN\_nBTcf}} \cdot [\text{PROTEIN\_P\_nBTcf}]}{c_{\text{PROTEIN\_nBTcf}} + [\text{PROTEIN\_P\_nBTcf}]} \quad (374)$$

Table 519: Properties of each parameter.

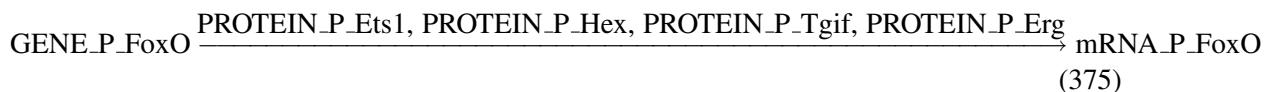
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-nBTcf			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBTcf			1.0		<input checked="" type="checkbox"/>

## 7.132 Reaction GENE\_P\_FoxO\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_FoxO\_transcription

### Reaction equation



### Reactant

Table 520: Properties of each reactant.

Id	Name	SBO
GENE_P_FoxO	GENE_P_FoxO	

### Modifiers

Table 521: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Hex	PROTEIN_P_Hex	
PROTEIN_P_Tgif	PROTEIN_P_Tgif	
PROTEIN_P_Erg	PROTEIN_P_Erg	

### Product

Table 522: Properties of each product.

Id	Name	SBO
mRNA_P_FoxO	mRNA_P_FoxO	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{132} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_P\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_P\_Hex}]} \\ + \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_P\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_P\_Tgif}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_P\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_P\_Erg}]} \quad (376)$$

Table 523: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

### 7.133 Reaction GENE\_P\_FvMo\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_FvMo\_transcription

#### Reaction equation



#### Reactant

Table 524: Properties of each reactant.

Id	Name	SBO
GENE_P_FvMo	GENE_P_FvMo	

## Modifiers

Table 525: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Gcm	PROTEIN_P_Gcm	
PROTEIN_P_GataE	PROTEIN_P_GataE	

## Product

Table 526: Properties of each product.

Id	Name	SBO
mRNA_P_FvMo	mRNA_P_FvMo	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{133} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_P\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_P\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \quad (378)$$

Table 527: Properties of each parameter.

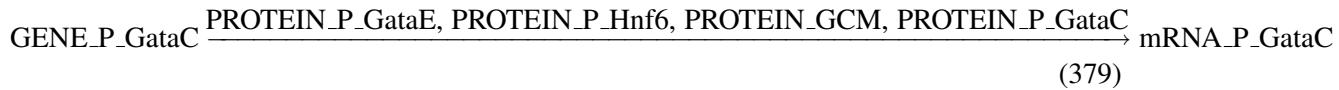
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

## 7.134 Reaction GENE\_P\_GataC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_GataC\_transcription

## Reaction equation



## Reactant

Table 528: Properties of each reactant.

Id	Name	SBO
GENE_P_GataC	GENE_P_GataC	

## Modifiers

Table 529: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	
PROTEIN_GCM	PROTEIN_GCM	
PROTEIN_P_GataC	PROTEIN_P_GataC	

## Product

Table 530: Properties of each product.

Id	Name	SBO
mRNA_P_GataC	mRNA_P_GataC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{134} = \left( \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_P\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_P\_Hnf6}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_GCM}} \cdot [\text{PROTEIN\_GCM}]}{c_{\text{PROTEIN\_GCM}} + [\text{PROTEIN\_GCM}]} \right) \\ \cdot \frac{k_{\text{PROTEIN\_GataC}} \cdot c_{\text{PROTEIN\_GataC}}}{c_{\text{PROTEIN\_GataC}} + [\text{PROTEIN\_P\_GataC}]} \quad (380)$$

Table 531: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GataC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GCM			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GCM			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.135 Reaction GENE\_P\_GataE\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_GataE\_transcription

#### Reaction equation



#### Reactant

Table 532: Properties of each reactant.

Id	Name	SBO
GENE_P_GataE	GENE_P_GataE	

#### Modifiers

Table 533: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_SuHN	PROTEIN_P_SuHN	
PROTEIN_P_Hox	PROTEIN_P_Hox	

## Product

Table 534: Properties of each product.

Id	Name	SBO
mRNA_P_GataE	mRNA_P_GataE	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{135} = \left( \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]} \right. \\ \left. + \frac{k_{\text{PROTEIN\_SuHN}} \cdot [\text{PROTEIN\_P\_SuHN}]}{c_{\text{PROTEIN\_SuHN}} + [\text{PROTEIN\_P\_SuHN}]} \right) \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_P\_Hox}]} \quad (382)$$

Table 535: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hox			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>

## 7.136 Reaction GENE\_P\_Gcad\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Gcad\_transcription

### Reaction equation



### Reactant

Table 536: Properties of each reactant.

Id	Name	SBO
GENE_P_Gcad	GENE_P_Gcad	

### Modifiers

Table 537: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqGcad	PROTEIN_P_UbiqGcad	
PROTEIN_P_Snail	PROTEIN_P_Snail	

### Product

Table 538: Properties of each product.

Id	Name	SBO
mRNA_P_Gcad	mRNA_P_Gcad	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{136} = \frac{k_{\text{PROTEIN\_UbiqGcad}} \cdot [\text{PROTEIN\_P\_UbiqGcad}]}{c_{\text{PROTEIN\_UbiqGcad}} + [\text{PROTEIN\_P\_UbiqGcad}]} \cdot \frac{k_{\text{PROTEIN\_Snail}} \cdot c_{\text{PROTEIN\_Snail}}}{c_{\text{PROTEIN\_Snail}} + [\text{PROTEIN\_P\_Snail}]} \quad (384)$$

Table 539: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Snail			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Snail			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-UbiqGcad			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqGcad			1.0		<input checked="" type="checkbox"/>

### 7.137 Reaction GENE\_P\_Gcm\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by six modifiers.

**Name** GENE\_P\_Gcm\_transcription

#### Reaction equation



#### Reactant

Table 540: Properties of each reactant.

Id	Name	SBO
GENE_P_Gcm	GENE_P_Gcm	

#### Modifiers

Table 541: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_nBCF	PROTEIN_P_nBCF	
PROTEIN_P_SuHN	PROTEIN_P_SuHN	
PROTEIN_P_Gcm	PROTEIN_P_Gcm	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	
PROTEIN_P_FoxA	PROTEIN_P_FoxA	
PROTEIN_P_Alx1	PROTEIN_P_Alx1	

## Product

Table 542: Properties of each product.

Id	Name	SBO
mRNA_P_Gcm	mRNA_P_Gcm	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{137} = & \left( \frac{k_{\text{PROTEIN\_nBTCF}} \cdot [\text{PROTEIN\_P\_nBTCF}]}{c_{\text{PROTEIN\_nBTCF}} + [\text{PROTEIN\_P\_nBTCF}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_SuHN}} \cdot [\text{PROTEIN\_P\_SuHN}]}{c_{\text{PROTEIN\_SuHN}} + [\text{PROTEIN\_P\_SuHN}]} \\
 & + \left. \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_P\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_P\_Gcm}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_P\_GroTCF}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_FoxA}} \cdot c_{\text{PROTEIN\_FoxA}}}{c_{\text{PROTEIN\_FoxA}} + [\text{PROTEIN\_P\_FoxA}]} \cdot \frac{k_{\text{PROTEIN\_Alx1}} \cdot c_{\text{PROTEIN\_Alx1}}}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_P\_Alx1}]} \quad (386)
 \end{aligned}$$

Table 543: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_FoxA			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxA			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTcf			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTcf			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>

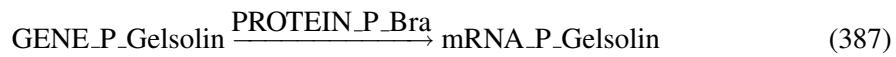
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_SuHN			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

### 7.138 Reaction GENE\_P\_Gelsolin\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Gelsolin\_transcription

**Reaction equation**



**Reactant**

Table 544: Properties of each reactant.

Id	Name	SBO
GENE_P_Gelsolin	GENE_P_Gelsolin	

**Modifier**

Table 545: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Bra	PROTEIN_P_Bra	

**Product**

Table 546: Properties of each product.

Id	Name	SBO
mRNA_P_Gelsolin	mRNA_P_Gelsolin	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{138} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_P\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_P\_Bra}]} \quad (388)$$

Table 547: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>

## 7.139 Reaction GENE\_P\_HesC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_HesC\_transcription

### Reaction equation



### Reactant

Table 548: Properties of each reactant.

Id	Name	SBO
GENE_P_HesC	GENE_P_HesC	

### Modifiers

Table 549: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqHesC	PROTEIN_P_UbiqHesC	
PROTEIN_P_Pmar1	PROTEIN_P_Pmar1	

## Product

Table 550: Properties of each product.

Id	Name	SBO
mRNA_P_HesC	mRNA_P_HesC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{139} = \frac{k_{\text{PROTEIN\_UbiqHesC}} \cdot [\text{PROTEIN\_P\_UbiqHesC}]}{c_{\text{PROTEIN\_UbiqHesC}} + [\text{PROTEIN\_P\_UbiqHesC}]} \cdot \frac{k_{\text{PROTEIN\_Pmar1}} \cdot c_{\text{PROTEIN\_Pmar1}}}{c_{\text{PROTEIN\_Pmar1}} + [\text{PROTEIN\_P\_Pmar1}]} \quad (390)$$

Table 551: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqHesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqHesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Pmar1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Pmar1			1.0		<input checked="" type="checkbox"/>

## 7.140 Reaction GENE\_P\_Hex\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_Hex\_transcription

### Reaction equation



## Reactant

Table 552: Properties of each reactant.

Id	Name	SBO
GENE_P_Hex	GENE_P_Hex	

## Modifiers

Table 553: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Tgif	PROTEIN_P_Tgif	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Erg	PROTEIN_P_Erg	

## Product

Table 554: Properties of each product.

Id	Name	SBO
mRNA_P_Hex	mRNA_P_Hex	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{140} = \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_P\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_P\_Tgif}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_P\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_P\_Erg}]} \quad (392)$$

Table 555: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>

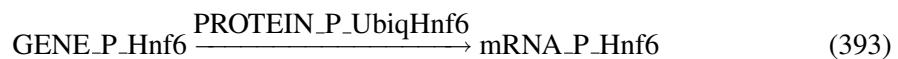
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

### 7.141 Reaction GENE\_P\_Hnf6\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Hnf6\_transcription

**Reaction equation**



**Reactant**

Table 556: Properties of each reactant.

Id	Name	SBO
GENE_P_Hnf6	GENE_P_Hnf6	

**Modifier**

Table 557: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqHnf6	PROTEIN_P_UbiqHnf6	

**Product**

Table 558: Properties of each product.

Id	Name	SBO
mRNA_P_Hnf6	mRNA_P_Hnf6	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{141} = \frac{k_{\text{PROTEIN\_UbiqHnf6}} \cdot [\text{PROTEIN\_P\_UbiqHnf6}]}{c_{\text{PROTEIN\_UbiqHnf6}} + [\text{PROTEIN\_P\_UbiqHnf6}]} \quad (394)$$

Table 559: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqHnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqHnf6			1.0		<input checked="" type="checkbox"/>

## 7.142 Reaction GENE\_P\_Hox\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_P\_Hox\_transcription

### Reaction equation



### Reactant

Table 560: Properties of each reactant.

Id	Name	SBO
GENE_P_Hox	GENE_P_Hox	

### Modifiers

Table 561: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	
PROTEIN_P_nBCF	PROTEIN_P_nBCF	
PROTEIN_P_Eve	PROTEIN_P_Eve	

Id	Name	SBO
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

## Product

Table 562: Properties of each product.

Id	Name	SBO
mRNA_P_Hox	mRNA_P_Hox	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{142} = & \left( \frac{k_{\text{PROTEIN_Blimp1}} \cdot [\text{PROTEIN\_P_Blimp1}]}{c_{\text{PROTEIN_Blimp1}} + [\text{PROTEIN\_P_Blimp1}]} \right. \\
 & + \frac{k_{\text{PROTEIN_nTCF}} \cdot [\text{PROTEIN\_P_nTCF}]}{c_{\text{PROTEIN_nTCF}} + [\text{PROTEIN\_P_nTCF}]} \\
 & + \left. \frac{k_{\text{PROTEIN_Eve}} \cdot [\text{PROTEIN\_P_Eve}]}{c_{\text{PROTEIN_Eve}} + [\text{PROTEIN\_P_Eve}]} + \frac{k_{\text{PROTEIN_Otx}} \cdot [\text{PROTEIN\_P_Otx}]}{c_{\text{PROTEIN_Otx}} + [\text{PROTEIN\_P_Otx}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN_GroTCF}} \cdot c_{\text{PROTEIN_GroTCF}}}{c_{\text{PROTEIN_GroTCF}} + [\text{PROTEIN\_P_GroTCF}]}
 \end{aligned} \tag{396}$$

Table 563: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>

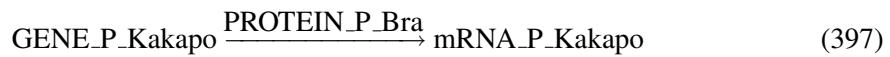
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Eve			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>

### 7.143 Reaction GENE\_P\_Kakapo\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Kakapo\_transcription

**Reaction equation**



**Reactant**

Table 564: Properties of each reactant.

Id	Name	SBO
GENE_P_Kakapo	GENE_P_Kakapo	

**Modifier**

Table 565: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Bra	PROTEIN_P_Bra	

**Product**

Table 566: Properties of each product.

Id	Name	SBO
mRNA_P_Kakapo	mRNA_P_Kakapo	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{143} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_P\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_P\_Bra}]} \quad (398)$$

Table 567: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Bra					

## 7.144 Reaction GENE\_P\_Lim\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Lim\_transcription

### Reaction equation



### Reactant

Table 568: Properties of each reactant.

Id	Name	SBO
GENE_P_Lim	GENE_P_Lim	

### Modifiers

Table 569: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_Otx	PROTEIN_P_Otx	

## Product

Table 570: Properties of each product.

Id	Name	SBO
mRNA_P_Lim	mRNA_P_Lim	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{144} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]} \quad (400)$$

Table 571: Properties of each parameter.

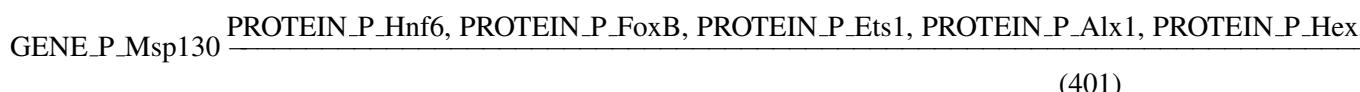
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.145 Reaction GENE\_P\_Msp130\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_P\_Msp130\_transcription

### Reaction equation



## Reactant

Table 572: Properties of each reactant.

Id	Name	SBO
GENE_P_Msp130	GENE_P_Msp130	

## Modifiers

Table 573: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	
PROTEIN_P_FoxB	PROTEIN_P_FoxB	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_Hex	PROTEIN_P_Hex	
PROTEIN_P_TBr	PROTEIN_P_TBr	
PROTEIN_P_Erg	PROTEIN_P_Erg	

## Product

Table 574: Properties of each product.

Id	Name	SBO
mRNA_P_Msp130	mRNA_P_Msp130	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{145} = \frac{k\_PROTEIN\_Hnf6 \cdot [PROTEIN\_P\_Hnf6]}{c\_PROTEIN\_Hnf6 + [PROTEIN\_P\_Hnf6]} + \frac{k\_PROTEIN\_FoxB \cdot [PROTEIN\_P\_FoxB]}{c\_PROTEIN\_FoxB + [PROTEIN\_P\_FoxB]} \\ + \frac{k\_PROTEIN\_Ets1 \cdot [PROTEIN\_P\_Ets1]}{c\_PROTEIN\_Ets1 + [PROTEIN\_P\_Ets1]} + \frac{k\_PROTEIN\_Alx1 \cdot [PROTEIN\_P\_Alx1]}{c\_PROTEIN\_Alx1 + [PROTEIN\_P\_Alx1]} \\ + \frac{k\_PROTEIN\_Hex \cdot [PROTEIN\_P\_Hex]}{c\_PROTEIN\_Hex + [PROTEIN\_P\_Hex]} + \frac{k\_PROTEIN\_TBr \cdot [PROTEIN\_P\_TBr]}{c\_PROTEIN\_TBr + [PROTEIN\_P\_TBr]} \\ + \frac{k\_PROTEIN\_Erg \cdot [PROTEIN\_P\_Erg]}{c\_PROTEIN\_Erg + [PROTEIN\_P\_Erg]}$$

(402)

Table 575: Properties of each parameter.

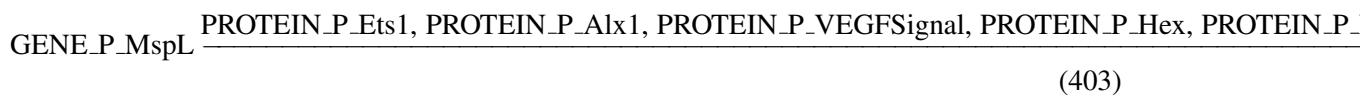
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxB			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.146 Reaction GENE\_P\_MspL\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by five modifiers.

**Name** GENE\_P\_MspL\_transcription

#### Reaction equation



## Reactant

Table 576: Properties of each reactant.

Id	Name	SBO
GENE_P_MspL	GENE_P_MspL	

## Modifiers

Table 577: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_VEGFSignal	PROTEIN_P_VEGFSignal	
PROTEIN_P_Hex	PROTEIN_P_Hex	
PROTEIN_P_Erg	PROTEIN_P_Erg	

## Product

Table 578: Properties of each product.

Id	Name	SBO
mRNA_P_MspL	mRNA_P_MspL	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{146} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_P\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_P\_Alx1}]} \\ + \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_P\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_P\_VEGFSignal}]} \\ + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_P\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_P\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_P\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_P\_Erg}]} \quad (404)$$

Table 579: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-VEGFSignal			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>

### 7.147 Reaction GENE\_P\_Not\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Not\_transcription

#### Reaction equation



#### Reactant

Table 580: Properties of each reactant.

Id	Name	SBO
GENE_P_Not	GENE_P_Not	

#### Modifier

Table 581: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	

## Product

Table 582: Properties of each product.

Id	Name	SBO
mRNA_P_Not	mRNA_P_Not	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{147} = \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \quad (406)$$

Table 583: Properties of each parameter.

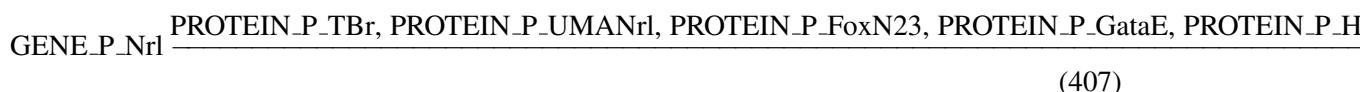
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

## 7.148 Reaction GENE\_P\_Nrl\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by six modifiers.

**Name** GENE\_P\_Nrl\_transcription

### Reaction equation



## Reactant

Table 584: Properties of each reactant.

Id	Name	SBO
GENE_P_Nrl	GENE_P_Nrl	

## Modifiers

Table 585: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_TBr	PROTEIN_P_TBr	
PROTEIN_P_UMANrl	PROTEIN_P_UMANrl	
PROTEIN_P_FoxN23	PROTEIN_P_FoxN23	
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_HesC	PROTEIN_P_HesC	
PROTEIN_P_Tgif	PROTEIN_P_Tgif	

## Product

Table 586: Properties of each product.

Id	Name	SBO
mRNA_P_Nrl	mRNA_P_Nrl	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{148} = & \left( \frac{k_{\text{PROTEIN\_TBr}} \cdot [\text{PROTEIN\_P\_TBr}]}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_P\_TBr}]} \right. \\
 & + \frac{k_{\text{PROTEIN\_UMANrl}} \cdot [\text{PROTEIN\_P\_UMANrl}]}{c_{\text{PROTEIN\_UMANrl}} + [\text{PROTEIN\_P\_UMANrl}]} \\
 & + \left. \frac{k_{\text{PROTEIN\_FoxN23}} \cdot [\text{PROTEIN\_P\_FoxN23}]}{c_{\text{PROTEIN\_FoxN23}} + [\text{PROTEIN\_P\_FoxN23}]} \right) \\
 & \cdot \frac{k_{\text{PROTEIN\_GataE}} \cdot c_{\text{PROTEIN\_GataE}}}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \\
 & \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \cdot \frac{k_{\text{PROTEIN\_Tgif}} \cdot c_{\text{PROTEIN\_Tgif}}}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_P\_Tgif}]}
 \end{aligned} \tag{408}$$

Table 587: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UMANrl			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UMANrl			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_FoxN23			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_FoxN23			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>

### 7.149 Reaction GENE\_P\_OrCt\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_OrCt\_transcription

**Reaction equation**



**Reactant**

Table 588: Properties of each reactant.

Id	Name	SBO
GENE_P_OrCt	GENE_P_OrCt	

## Modifiers

Table 589: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Bra	PROTEIN_P_Bra	
PROTEIN_P_Hox	PROTEIN_P_Hox	

## Product

Table 590: Properties of each product.

Id	Name	SBO
mRNA_P_OrCt	mRNA_P_OrCt	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{149} = \frac{k_{\text{PROTEIN\_Bra}} \cdot [\text{PROTEIN\_P\_Bra}]}{c_{\text{PROTEIN\_Bra}} + [\text{PROTEIN\_P\_Bra}]} \cdot \frac{k_{\text{PROTEIN\_Hox}} \cdot c_{\text{PROTEIN\_Hox}}}{c_{\text{PROTEIN\_Hox}} + [\text{PROTEIN\_P\_Hox}]} \quad (410)$$

Table 591: Properties of each parameter.

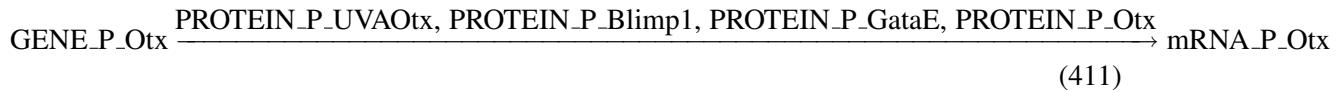
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Bra			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hox			1.0		<input checked="" type="checkbox"/>

## 7.150 Reaction GENE\_P\_Otx\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_Otx\_transcription

### Reaction equation



### Reactant

Table 592: Properties of each reactant.

Id	Name	SBO
GENE_P_Otx	GENE_P_Otx	

### Modifiers

Table 593: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UVAOtx	PROTEIN_P_UVAOtx	
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	
PROTEIN_P_GataE	PROTEIN_P_GataE	
PROTEIN_P_Otx	PROTEIN_P_Otx	

### Product

Table 594: Properties of each product.

Id	Name	SBO
mRNA_P_Otx	mRNA_P_Otx	

### Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{150} = & \frac{k_{\text{PROTEIN\_UVAOtx}} \cdot [\text{PROTEIN\_P\_UVAOtx}]}{c_{\text{PROTEIN\_UVAOtx}} + [\text{PROTEIN\_P\_UVAOtx}]} \\
& + \frac{k_{\text{PROTEIN\_Blimp1}} \cdot [\text{PROTEIN\_P\_Blimp1}]}{c_{\text{PROTEIN\_Blimp1}} + [\text{PROTEIN\_P\_Blimp1}]} \\
& + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]}
\end{aligned} \tag{412}$$

Table 595: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_UVAOtx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UVAOtx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>

### 7.151 Reaction GENE\_P\_Pks\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_Pks\_transcription

#### Reaction equation



#### Reactant

Table 596: Properties of each reactant.

Id	Name	SBO
GENE_P_Pks	GENE_P_Pks	

## Modifiers

Table 597: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Gcm	PROTEIN_P_Gcm	
PROTEIN_P_GataE	PROTEIN_P_GataE	

## Product

Table 598: Properties of each product.

Id	Name	SBO
mRNA_P_Pks	mRNA_P_Pks	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{151} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_P\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_P\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \quad (414)$$

Table 599: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GataE			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Gcm			1.0		<input checked="" type="checkbox"/>

## 7.152 Reaction GENE\_P\_Pmar1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_Pmar1\_transcription

### Reaction equation



### Reactant

Table 600: Properties of each reactant.

Id	Name	SBO
GENE_P_Pmar1	GENE_P_Pmar1	

### Modifiers

Table 601: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_nBCF	PROTEIN_P_nBCF	
PROTEIN_P_Otx	PROTEIN_P_Otx	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

### Product

Table 602: Properties of each product.

Id	Name	SBO
mRNA_P_Pmar1	mRNA_P_Pmar1	

### Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{152} = \left( \frac{k_{\text{PROTEIN\_nBCF}} \cdot [\text{PROTEIN\_P\_nBCF}]}{c_{\text{PROTEIN\_nBCF}} + [\text{PROTEIN\_P\_nBCF}]} + \frac{k_{\text{PROTEIN\_Otx}} \cdot [\text{PROTEIN\_P\_Otx}]}{c_{\text{PROTEIN\_Otx}} + [\text{PROTEIN\_P\_Otx}]} \right) \cdot \frac{k_{\text{PROTEIN\_GroTCF}} \cdot c_{\text{PROTEIN\_GroTCF}}}{c_{\text{PROTEIN\_GroTCF}} + [\text{PROTEIN\_P\_GroTCF}]} \quad (416)$$

Table 603: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Otx			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-nBCF			1.0		<input checked="" type="checkbox"/>

### 7.153 Reaction GENE\_P\_Sm27\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by seven modifiers.

**Name** GENE\_P\_Sm27\_transcription

#### Reaction equation



#### Reactant

Table 604: Properties of each reactant.

Id	Name	SBO
GENE_P_Sm27	GENE_P_Sm27	

Id	Name	SBO
----	------	-----

## Modifiers

Table 605: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Dri	PROTEIN_P_Dri	
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_Tel	PROTEIN_P_Tel	
PROTEIN_P_Hex	PROTEIN_P_Hex	
PROTEIN_P_Erg	PROTEIN_P_Erg	

## Product

Table 606: Properties of each product.

Id	Name	SBO
mRNA_P_Sm27	mRNA_P_Sm27	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
 v_{153} = & \frac{k_{\text{PROTEIN\_Dri}} \cdot [\text{PROTEIN\_P\_Dri}]}{c_{\text{PROTEIN\_Dri}} + [\text{PROTEIN\_P\_Dri}]} + \frac{k_{\text{PROTEIN\_Hnf6}} \cdot [\text{PROTEIN\_P\_Hnf6}]}{c_{\text{PROTEIN\_Hnf6}} + [\text{PROTEIN\_P\_Hnf6}]} \\
 & + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \\
 & + \frac{k_{\text{PROTEIN\_Alx1}} \cdot [\text{PROTEIN\_P\_Alx1}]}{c_{\text{PROTEIN\_Alx1}} + [\text{PROTEIN\_P\_Alx1}]} + \frac{k_{\text{PROTEIN\_Tel}} \cdot [\text{PROTEIN\_P\_Tel}]}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_P\_Tel}]} \\
 & + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_P\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_P\_Hex}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_P\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_P\_Erg}]}
 \end{aligned} \tag{418}$$

Table 607: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.154 Reaction GENE\_P\_Sm30\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Sm30\_transcription

**Reaction equation**



## Reactant

Table 608: Properties of each reactant.

Id	Name	SBO
GENE_P_Sm30	GENE_P_Sm30	

## Modifier

Table 609: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_VEGFSignal	PROTEIN_P_VEGFSignal	

## Product

Table 610: Properties of each product.

Id	Name	SBO
mRNA_P_Sm30	mRNA_P_Sm30	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{154} = \frac{k_{\text{PROTEIN\_VEGFSignal}} \cdot [\text{PROTEIN\_P\_VEGFSignal}]}{c_{\text{PROTEIN\_VEGFSignal}} + [\text{PROTEIN\_P\_VEGFSignal}]} \quad (420)$$

Table 611: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_VEGFSignal					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_VEGFSignal					

## 7.155 Reaction GENE\_P\_Sm50\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by eight modifiers.

**Name** GENE\_P\_Sm50\_transcription

## Reaction equation



## Reactant

Table 612: Properties of each reactant.

Id	Name	SBO
GENE_P_Sm50	GENE_P_Sm50	

## Modifiers

Table 613: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Dri	PROTEIN_P_Dri	
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_Tel	PROTEIN_P_Tel	
PROTEIN_P_Hex	PROTEIN_P_Hex	
PROTEIN_P_Erg	PROTEIN_P_Erg	
PROTEIN_P_VEGFSignal	PROTEIN_P_VEGFSignal	

## Product

Table 614: Properties of each product.

Id	Name	SBO
mRNA_P_Sm50	mRNA_P_Sm50	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned}
v_{155} = & \frac{k_{PROTEIN\_Dri} \cdot [PROTEIN\_P\_Dri]}{c_{PROTEIN\_Dri} + [PROTEIN\_P\_Dri]} + \frac{k_{PROTEIN\_Hnf6} \cdot [PROTEIN\_P\_Hnf6]}{c_{PROTEIN\_Hnf6} + [PROTEIN\_P\_Hnf6]} \\
& + \frac{k_{PROTEIN\_Ets1} \cdot [PROTEIN\_P\_Ets1]}{c_{PROTEIN\_Ets1} + [PROTEIN\_P\_Ets1]} \\
& + \frac{k_{PROTEIN\_Alx1} \cdot [PROTEIN\_P\_Alx1]}{c_{PROTEIN\_Alx1} + [PROTEIN\_P\_Alx1]} + \frac{k_{PROTEIN\_Tel} \cdot [PROTEIN\_P\_Tel]}{c_{PROTEIN\_Tel} + [PROTEIN\_P\_Tel]} \\
& + \frac{k_{PROTEIN\_Hex} \cdot [PROTEIN\_P\_Hex]}{c_{PROTEIN\_Hex} + [PROTEIN\_P\_Hex]} + \frac{k_{PROTEIN\_Erg} \cdot [PROTEIN\_P\_Erg]}{c_{PROTEIN\_Erg} + [PROTEIN\_P\_Erg]} \\
& + \frac{k_{PROTEIN\_VEGFSignal} \cdot [PROTEIN\_P\_VEGFSignal]}{c_{PROTEIN\_VEGFSignal} + [PROTEIN\_P\_VEGFSignal]}
\end{aligned} \tag{422}$$

Table 615: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Alx1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Erg			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_VEGFSignal			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Tel			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

## 7.156 Reaction GENE\_P\_Snail\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** GENE\_P\_Snail\_transcription

**Reaction equation**



**Reactant**

Table 616: Properties of each reactant.

Id	Name	SBO
GENE_P_Snail	GENE_P_Snail	

**Modifier**

Table 617: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Hex	PROTEIN_P_Hex	

**Product**

Table 618: Properties of each product.

Id	Name	SBO
mRNA_P_Snail	mRNA_P_Snail	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{156} = \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_P\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_P\_Hex}]} \quad (424)$$

Table 619: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>

### 7.157 Reaction GENE\_P\_SoxB1\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_SoxB1\_transcription

#### Reaction equation



#### Reactant

Table 620: Properties of each reactant.

Id	Name	SBO
GENE_P_SoxB1	GENE_P_SoxB1	

#### Modifiers

Table 621: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqSoxB1	PROTEIN_P_UbiqSoxB1	
PROTEIN_P_SoxB1	PROTEIN_P_SoxB1	

#### Product

Table 622: Properties of each product.

Id	Name	SBO
mRNA_P_SoxB1	mRNA_P_SoxB1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{157} = \frac{k_{\text{PROTEIN\_UbiqSoxB1}} \cdot [\text{PROTEIN\_P\_UbiqSoxB1}]}{c_{\text{PROTEIN\_UbiqSoxB1}} + [\text{PROTEIN\_P\_UbiqSoxB1}]} \cdot \frac{k_{\text{PROTEIN\_SoxB1}} \cdot c_{\text{PROTEIN\_SoxB1}}}{c_{\text{PROTEIN\_SoxB1}} + [\text{PROTEIN\_P\_SoxB1}]} \quad (426)$$

Table 623: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_UbiqSoxB1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_UbiqSoxB1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SoxB1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SoxB1					

### 7.158 Reaction GENE\_P\_SoxC\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_SoxC\_transcription

#### Reaction equation



#### Reactant

Table 624: Properties of each reactant.

Id	Name	SBO
GENE_P_SoxC	GENE_P_SoxC	

## Modifiers

Table 625: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqSoxC	PROTEIN_P_UbiqSoxC	
PROTEIN_P_HesC	PROTEIN_P_HesC	
PROTEIN_P_SoxC	PROTEIN_P_SoxC	

## Product

Table 626: Properties of each product.

Id	Name	SBO
mRNA_P_SoxC	mRNA_P_SoxC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{158} = \frac{k_{\text{PROTEIN\_UbiqSoxC}} \cdot [\text{PROTEIN\_P\_UbiqSoxC}]}{c_{\text{PROTEIN\_UbiqSoxC}} + [\text{PROTEIN\_P\_UbiqSoxC}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \cdot \frac{k_{\text{PROTEIN\_SoxC}} \cdot c_{\text{PROTEIN\_SoxC}}}{c_{\text{PROTEIN\_SoxC}} + [\text{PROTEIN\_P\_SoxC}]} \quad (428)$$

Table 627: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SoxC					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_SoxC					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_HesC					

Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_UbiqSoxC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_UbiqSoxC			1.0		<input checked="" type="checkbox"/>

### 7.159 Reaction GENE\_P\_SuTx\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by two modifiers.

**Name** GENE\_P\_SuTx\_transcription

#### Reaction equation



#### Reactant

Table 628: Properties of each reactant.

Id	Name	SBO
GENE_P_SuTx	GENE_P_SuTx	

#### Modifiers

Table 629: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Gcm	PROTEIN_P_Gcm	
PROTEIN_P_GataE	PROTEIN_P_GataE	

#### Product

Table 630: Properties of each product.

Id	Name	SBO
mRNA_P_SuTx	mRNA_P_SuTx	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{159} = \frac{k_{\text{PROTEIN\_Gcm}} \cdot [\text{PROTEIN\_P\_Gcm}]}{c_{\text{PROTEIN\_Gcm}} + [\text{PROTEIN\_P\_Gcm}]} + \frac{k_{\text{PROTEIN\_GataE}} \cdot [\text{PROTEIN\_P\_GataE}]}{c_{\text{PROTEIN\_GataE}} + [\text{PROTEIN\_P\_GataE}]} \quad (430)$$

Table 631: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_GataE					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Gcm					

## 7.160 Reaction GENE\_P\_TBr\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_TBr\_transcription

### Reaction equation



### Reactant

Table 632: Properties of each reactant.

Id	Name	SBO
GENE_P_TBr	GENE_P_TBr	

### Modifiers

Table 633: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_HesC	PROTEIN_P_HesC	
PROTEIN_P_TBr	PROTEIN_P_TBr	

## Product

Table 634: Properties of each product.

Id	Name	SBO
mRNA_P_TBr	mRNA_P_TBr	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{160} = \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \\ \cdot \frac{k_{\text{PROTEIN\_TBr}} \cdot c_{\text{PROTEIN\_TBr}}}{c_{\text{PROTEIN\_TBr}} + [\text{PROTEIN\_P\_TBr}]} \quad (432)$$

Table 635: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_TBr			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_HesC			1.0		<input checked="" type="checkbox"/>

## 7.161 Reaction GENE\_P\_Tel\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_Tel\_transcription

### Reaction equation



### Reactant

Table 636: Properties of each reactant.

Id	Name	SBO
GENE_P_Tel	GENE_P_Tel	

### Modifiers

Table 637: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_UbiqTel	PROTEIN_P_UbiqTel	
PROTEIN_P_Tel	PROTEIN_P_Tel	
PROTEIN_P_HesC	PROTEIN_P_HesC	

### Product

Table 638: Properties of each product.

Id	Name	SBO
mRNA_P_Tel	mRNA_P_Tel	

### Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{161} = \frac{k_{\text{PROTEIN\_UbiqTel}} \cdot [\text{PROTEIN\_P\_UbiqTel}]}{c_{\text{PROTEIN\_UbiqTel}} + [\text{PROTEIN\_P\_UbiqTel}]} \cdot \frac{k_{\text{PROTEIN\_Tel}} \cdot c_{\text{PROTEIN\_Tel}}}{c_{\text{PROTEIN\_Tel}} + [\text{PROTEIN\_P\_Tel}]} \cdot \frac{k_{\text{PROTEIN\_HesC}} \cdot c_{\text{PROTEIN\_HesC}}}{c_{\text{PROTEIN\_HesC}} + [\text{PROTEIN\_P\_HesC}]} \quad (434)$$

Table 639: Properties of each parameter.

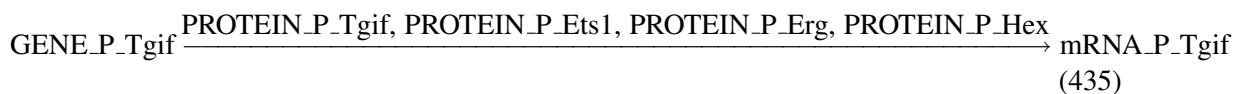
Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-UbiqTel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-UbiqTel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Tel			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Tel			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-HesC			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-HesC			1.0		<input checked="" type="checkbox"/>

## 7.162 Reaction GENE\_P\_Tgif\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_Tgif\_transcription

### Reaction equation



### Reactant

Table 640: Properties of each reactant.

Id	Name	SBO
GENE_P_Tgif	GENE_P_Tgif	

### Modifiers

Table 641: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Tgif	PROTEIN_P_Tgif	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Erg	PROTEIN_P_Erg	
PROTEIN_P_Hex	PROTEIN_P_Hex	

## Product

Table 642: Properties of each product.

Id	Name	SBO
mRNA_P_Tgif	mRNA_P_Tgif	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{162} = \frac{k_{\text{PROTEIN\_Tgif}} \cdot [\text{PROTEIN\_P\_Tgif}]}{c_{\text{PROTEIN\_Tgif}} + [\text{PROTEIN\_P\_Tgif}]} + \frac{k_{\text{PROTEIN\_Ets1}} \cdot [\text{PROTEIN\_P\_Ets1}]}{c_{\text{PROTEIN\_Ets1}} + [\text{PROTEIN\_P\_Ets1}]} + \frac{k_{\text{PROTEIN\_Erg}} \cdot [\text{PROTEIN\_P\_Erg}]}{c_{\text{PROTEIN\_Erg}} + [\text{PROTEIN\_P\_Erg}]} + \frac{k_{\text{PROTEIN\_Hex}} \cdot [\text{PROTEIN\_P\_Hex}]}{c_{\text{PROTEIN\_Hex}} + [\text{PROTEIN\_P\_Hex}]} \quad (436)$$

Table 643: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Ets1					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Hex					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Erg					
c_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Erg					
k_PROTEIN-			1.0		<input checked="" type="checkbox"/>
_Tgif					

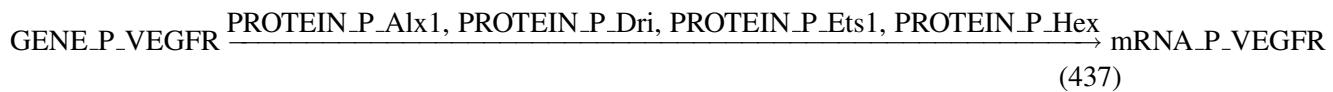
Id	Name	SBO	Value	Unit	Constant
c_PROTEIN-_Tgif			1.0		<input checked="" type="checkbox"/>

### 7.163 Reaction GENE\_P\_VEGFR\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by four modifiers.

**Name** GENE\_P\_VEGFR\_transcription

#### Reaction equation



#### Reactant

Table 644: Properties of each reactant.

Id	Name	SBO
GENE_P_VEGFR	GENE_P_VEGFR	

#### Modifiers

Table 645: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Alx1	PROTEIN_P_Alx1	
PROTEIN_P_Dri	PROTEIN_P_Dri	
PROTEIN_P_Ets1	PROTEIN_P_Ets1	
PROTEIN_P_Hex	PROTEIN_P_Hex	

#### Product

Table 646: Properties of each product.

Id	Name	SBO
mRNA_P_VEGFR	mRNA_P_VEGFR	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{163} = \frac{k_{PROTEIN\_Alx1} \cdot [PROTEIN\_P\_Alx1]}{c_{PROTEIN\_Alx1} + [PROTEIN\_P\_Alx1]} + \frac{k_{PROTEIN\_Dri} \cdot [PROTEIN\_P\_Dri]}{c_{PROTEIN\_Dri} + [PROTEIN\_P\_Dri]} \\ + \frac{k_{PROTEIN\_Ets1} \cdot [PROTEIN\_P\_Ets1]}{c_{PROTEIN\_Ets1} + [PROTEIN\_P\_Ets1]} + \frac{k_{PROTEIN\_Hex} \cdot [PROTEIN\_P\_Hex]}{c_{PROTEIN\_Hex} + [PROTEIN\_P\_Hex]} \quad (438)$$

Table 647: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Hex			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Ets1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Dri			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Dri			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-Alx1			1.0		<input checked="" type="checkbox"/>

## 7.164 Reaction GENE\_P\_Wnt8\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_Wnt8\_transcription

### Reaction equation



### Reactant

Table 648: Properties of each reactant.

Id	Name	SBO
GENE_P_Wnt8	GENE_P_Wnt8	

## Modifiers

Table 649: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_nBTF	PROTEIN_P_nBTF	
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

## Product

Table 650: Properties of each product.

Id	Name	SBO
mRNA_P_Wnt8	mRNA_P_Wnt8	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{164} = \left( \frac{k_{PROTEIN\_nBTF} \cdot [PROTEIN\_P\_nBTF]}{c_{PROTEIN\_nBTF} + [PROTEIN\_P\_nBTF]} + \frac{k_{PROTEIN\_Blimp1} \cdot [PROTEIN\_P\_Blimp1]}{c_{PROTEIN\_Blimp1} + [PROTEIN\_P\_Blimp1]} \right) \cdot \frac{k_{PROTEIN\_GroTCF} \cdot c_{PROTEIN\_GroTCF}}{c_{PROTEIN\_GroTCF} + [PROTEIN\_P\_GroTCF]} \quad (440)$$

Table 651: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-GroTCF			1.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Blimp1			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>

## 7.165 Reaction GENE\_P\_z13\_transcription\_0

This is an irreversible reaction of one reactant forming one product influenced by three modifiers.

**Name** GENE\_P\_z13\_transcription

**Reaction equation**



**Reactant**

Table 652: Properties of each reactant.

Id	Name	SBO
GENE_P_z13	GENE_P_z13	

**Modifiers**

Table 653: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_nBTF	PROTEIN_P_nBTF	
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	

**Product**

Table 654: Properties of each product.

Id	Name	SBO
mRNA_P_z13	mRNA_P_z13	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{165} = \frac{k_{PROTEIN\_nBTF} \cdot [PROTEIN\_P\_nBTF]}{c_{PROTEIN\_nBTF} + [PROTEIN\_P\_nBTF]} \cdot \frac{k_{PROTEIN\_GroTCF} \cdot c_{PROTEIN\_GroTCF}}{c_{PROTEIN\_GroTCF} + [PROTEIN\_P\_GroTCF]} \cdot \frac{k_{PROTEIN\_Hnf6} \cdot c_{PROTEIN\_Hnf6}}{c_{PROTEIN\_Hnf6} + [PROTEIN\_P\_Hnf6]} \quad (442)$$

Table 655: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
k_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_GroTCF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_nBTF			1.0		<input checked="" type="checkbox"/>
k_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>
c_PROTEIN-_Hnf6			1.0		<input checked="" type="checkbox"/>

### 7.166 Reaction M\_Gcad\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_Gcad\_Hill\_Kinetic

### Reaction equation



## Reactant

Table 656: Properties of each reactant.

Id	Name	SBO
PRE_M_Gcad	PRE_M_Gcad	

## Product

Table 657: Properties of each product.

Id	Name	SBO
mRNA_M_Gcad	mRNA_M_Gcad	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{166} = \frac{M\_Gcad\_S1 \cdot P\_Gcad\_HillK \cdot time^{P\_Gcad\_HillH}}{P\_Gcad\_theta1^{P\_Gcad\_HillH} + time^{P\_Gcad\_HillH}} + M\_Gcad\_S2 \cdot P\_Gcad\_HillK \cdot \left( 1 - \frac{time^{P\_Gcad\_HillH}}{P\_Gcad\_theta2^{P\_Gcad\_HillH} + time^{P\_Gcad\_HillH}} \right) \quad (444)$$

Table 658: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Gcad_HillH			8.0		<input checked="" type="checkbox"/>
P_Gcad_HillK			10.0		<input checked="" type="checkbox"/>
P_Gcad_theta1			1.0		<input checked="" type="checkbox"/>
P_Gcad_theta2			20.0		<input checked="" type="checkbox"/>

## 7.167 Reaction M\_Notch\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_Notch\_Hill\_Kinetic

## Reaction equation



## Reactant

Table 659: Properties of each reactant.

Id	Name	SBO
PRE_M_Notch	PRE_M_Notch	

## Product

Table 660: Properties of each product.

Id	Name	SBO
mRNA_M_Notch	mRNA_M_Notch	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{167} = \frac{M\_Notch\_S1 \cdot P\_Notch\_HillK \cdot \text{time}^{P\_Notch\_HillH}}{P\_Notch\_theta1^{P\_Notch\_HillH} + \text{time}^{P\_Notch\_HillH}} + M\_Notch\_S2 \cdot P\_Notch\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_Notch\_HillH}}{P\_Notch\_theta2^{P\_Notch\_HillH} + \text{time}^{P\_Notch\_HillH}} \right) \quad (446)$$

Table 661: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Notch-			8.0		<input checked="" type="checkbox"/>
_HillH					
P_Notch-			10.0		<input checked="" type="checkbox"/>
_HillK					
P_Notch-			1.0		<input checked="" type="checkbox"/>
_theta1					
P_Notch-			30.0		<input checked="" type="checkbox"/>
_theta2					

## 7.168 Reaction M\_Otx\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_Otx\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 662: Properties of each reactant.

Id	Name	SBO
PRE_M_Otx	PRE_M_Otx	

### Product

Table 663: Properties of each product.

Id	Name	SBO
mRNA_M_Otx	mRNA_M_Otx	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{168} = \frac{M\_Otx\_S1 \cdot P\_Otx\_HillK \cdot \text{time}^{P\_Otx\_HillH}}{P\_Otx\_theta1^{P\_Otx\_HillH} + \text{time}^{P\_Otx\_HillH}} + M\_Otx\_S2 \cdot P\_Otx\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_Otx\_HillH}}{P\_Otx\_theta2^{P\_Otx\_HillH} + \text{time}^{P\_Otx\_HillH}} \right) \quad (448)$$

Table 664: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Otx_HillK			10.0		<input checked="" type="checkbox"/>
P_Otx_HillH			8.0		<input checked="" type="checkbox"/>
P_Otx_theta1			1.0		<input checked="" type="checkbox"/>
P_Otx_theta2			11.0		<input checked="" type="checkbox"/>

## 7.169 Reaction M\_SoxB1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_SoxB1\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 665: Properties of each reactant.

Id	Name	SBO
PRE_M_SoxB1	PRE_M_SoxB1	

### Product

Table 666: Properties of each product.

Id	Name	SBO
mRNA_M_SoxB1	mRNA_M_SoxB1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{169} = \frac{M_{\text{SoxB1\_S1}} \cdot P_{\text{SoxB1\_HillK}} \cdot \text{time}^{P_{\text{SoxB1\_HillH}}}}{P_{\text{SoxB1\_theta1}}^{P_{\text{SoxB1\_HillH}}} + \text{time}^{P_{\text{SoxB1\_HillH}}}} + M_{\text{SoxB1\_S2}} \cdot P_{\text{SoxB1\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{SoxB1\_HillH}}}}{P_{\text{SoxB1\_theta2}}^{P_{\text{SoxB1\_HillH}}} + \text{time}^{P_{\text{SoxB1\_HillH}}}} \right) \quad (450)$$

Table 667: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_SoxB1-_theta1			1.0		<input checked="" type="checkbox"/>
P_SoxB1-_theta2			14.0		<input checked="" type="checkbox"/>
P_SoxB1-_HillK			10.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
P_SoxB1- _HillH			8.0		<input checked="" type="checkbox"/>

## 7.170 Reaction M\_SuH\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_SuH\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 668: Properties of each reactant.

Id	Name	SBO
PRE_M_SuH	PRE_M_SuH	

**Product**

Table 669: Properties of each product.

Id	Name	SBO
mRNA_M_SuH	mRNA_M_SuH	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{170} = \frac{M_{\text{SuH}}.S1 \cdot P_{\text{SuH}}.HillK \cdot \text{time}^{P_{\text{SuH}}.\text{HillH}}}{P_{\text{SuH}}.\text{theta1}^{P_{\text{SuH}}.\text{HillH}} + \text{time}^{P_{\text{SuH}}.\text{HillH}}} + M_{\text{SuH}}.S2 \cdot P_{\text{SuH}}.HillK \cdot \left( 1 - \frac{\text{time}^{P_{\text{SuH}}.\text{HillH}}}{P_{\text{SuH}}.\text{theta2}^{P_{\text{SuH}}.\text{HillH}} + \text{time}^{P_{\text{SuH}}.\text{HillH}}} \right) \quad (452)$$

Table 670: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_SuH_HillH			8.0		<input checked="" type="checkbox"/>
P_SuH_HillK			10.0		<input checked="" type="checkbox"/>
P_SuH_theta1			12.0		<input checked="" type="checkbox"/>
P_SuH_theta2			30.0		<input checked="" type="checkbox"/>

### 7.171 Reaction M\_UMADelta\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_UMADelta\_Hill\_Kinetic

#### Reaction equation



#### Reactant

Table 671: Properties of each reactant.

Id	Name	SBO
PRE_M_UMADelta	PRE_M_UMADelta	

#### Product

Table 672: Properties of each product.

Id	Name	SBO
mRNA_M_UMADelta	mRNA_M_UMADelta	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{171} = \frac{M\_UMADelta\_S1 \cdot P\_UMADelta\_HillK \cdot \text{time}^{P\_UMADelta\_HillH}}{P\_UMADelta\_theta1^{P\_UMADelta\_HillH} + \text{time}^{P\_UMADelta\_HillH}} + M\_UMADelta\_S2 \cdot P\_UMADelta\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_UMADelta\_HillH}}{P\_UMADelta\_theta2^{P\_UMADelta\_HillH} + \text{time}^{P\_UMADelta\_HillH}} \right) \quad (454)$$

Table 673: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UMADelta-			10.0		<input checked="" type="checkbox"/>
_HillK					
P_UMADelta-			8.0		<input checked="" type="checkbox"/>
_HillH					
P_UMADelta-			30.0		<input checked="" type="checkbox"/>
_theta2					
P_UMADelta-			19.0		<input checked="" type="checkbox"/>
_theta1					

## 7.172 Reaction M\_UMANrl\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_UMANrl\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 674: Properties of each reactant.

Id	Name	SBO
PRE_M_UMANrl	PRE_M_UMANrl	

### Product

Table 675: Properties of each product.

Id	Name	SBO
mRNA_M_UMANrl	mRNA_M_UMANrl	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{172} = \frac{M\_UMANrl\_S1 \cdot P\_UMANrl\_HillK \cdot time^{P\_UMANrl\_HillH}}{P\_UMANrl\_theta1^{P\_UMANrl\_HillH} + time^{P\_UMANrl\_HillH}} + M\_UMANrl\_S2 \\ \cdot P\_UMANrl\_HillK \cdot \left( 1 - \frac{time^{P\_UMANrl\_HillH}}{P\_UMANrl\_theta2^{P\_UMANrl\_HillH} + time^{P\_UMANrl\_HillH}} \right) \quad (456)$$

Table 676: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P\_UMANrl\_theta2			30.0		<input checked="" type="checkbox"/>
P\_UMANrl\_theta1			24.0		<input checked="" type="checkbox"/>
P\_UMANrl\_HillK			10.0		<input checked="" type="checkbox"/>
P\_UMANrl\_HillH			8.0		<input checked="" type="checkbox"/>

### 7.173 Reaction M\\_UMR\\_Hill\\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\\_UMR\\_Hill\\_Kinetic

**Reaction equation**



**Reactant**

Table 677: Properties of each reactant.

Id	Name	SBO
PRE\_M\_UMR	PRE\_M\_UMR	

**Product**

Table 678: Properties of each product.

Id	Name	SBO
mRNA\_M\_UMR	mRNA\_M\_UMR	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{173} = \frac{M\_UMR\_S1 \cdot P\_UMR\_HillK \cdot time^{P\_UMR\_HillH}}{P\_UMR\_theta1^{P\_UMR\_HillH} + time^{P\_UMR\_HillH}} + M\_UMR\_S2 \\ \cdot P\_UMR\_HillK \cdot \left( 1 - \frac{time^{P\_UMR\_HillH}}{P\_UMR\_theta2^{P\_UMR\_HillH} + time^{P\_UMR\_HillH}} \right) \quad (458)$$

Table 679: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P\_UMR\_HillH			8.0		<input checked="" type="checkbox"/>
P\_UMR\_HillK			10.0		<input checked="" type="checkbox"/>
P\_UMR\_theta1			15.0		<input checked="" type="checkbox"/>
P\_UMR\_theta2			30.0		<input checked="" type="checkbox"/>

## 7.174 Reaction M\_UbiqSoxB1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_UbiqSoxB1\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 680: Properties of each reactant.

Id	Name	SBO
PRE\_M\_UbiqSoxB1	PRE\_M\_UbiqSoxB1	

### Product

Table 681: Properties of each product.

Id	Name	SBO
mRNA\_M\_UbiqSoxB1	mRNA\_M\_UbiqSoxB1	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{174} = \frac{M\_UbiqSoxB1\_S1 \cdot P\_UbiqSoxB1\_HillK \cdot \text{time}^{P\_UbiqSoxB1\_HillH}}{P\_UbiqSoxB1\_theta1^{P\_UbiqSoxB1\_HillH} + \text{time}^{P\_UbiqSoxB1\_HillH}} \\ + M\_UbiqSoxB1\_S2 \cdot P\_UbiqSoxB1\_HillK \\ \cdot \left( 1 - \frac{\text{time}^{P\_UbiqSoxB1\_HillH}}{P\_UbiqSoxB1\_theta2^{P\_UbiqSoxB1\_HillH} + \text{time}^{P\_UbiqSoxB1\_HillH}} \right) \quad (460)$$

Table 682: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqSoxB1-_theta2			14.0		<input checked="" type="checkbox"/>
P_UbiqSoxB1-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqSoxB1-_HillK			10.0		<input checked="" type="checkbox"/>
P_UbiqSoxB1-_HillH			8.0		<input checked="" type="checkbox"/>

## 7.175 Reaction M\_cB\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** M\_cB\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 683: Properties of each reactant.

Id	Name	SBO
PRE_M_cB	PRE_M_cB	

### Product

Table 684: Properties of each product.

Id	Name	SBO
mRNA_M_cB	mRNA_M_cB	

### Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{175} = \frac{M\_cB\_S1 \cdot P\_cB\_HillK \cdot \text{time}^{P\_cB\_HillH}}{P\_cB\_theta1^{P\_cB\_HillH} + \text{time}^{P\_cB\_HillH}} + M\_cB\_S2 \cdot P\_cB\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_cB\_HillH}}{P\_cB\_theta2^{P\_cB\_HillH} + \text{time}^{P\_cB\_HillH}} \right) \quad (462)$$

Table 685: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_cB_theta1			1.0		<input checked="" type="checkbox"/>
P_cB_theta2			11.0		<input checked="" type="checkbox"/>
P_cB_HillH			8.0		<input checked="" type="checkbox"/>
P_cB_HillK			10.0		<input checked="" type="checkbox"/>

### 7.176 Reaction PROTEIN\_E\_Alx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Alx1\_degradation

#### Reaction equation



#### Reactant

Table 686: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Alx1	PROTEIN_E_Alx1	

#### Modifier

Table 687: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 688: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{176} = P\_protein\_deg \cdot [PROTEIN\_E\_Alx1] \quad (464)$$

Table 689: Properties of each parameter.

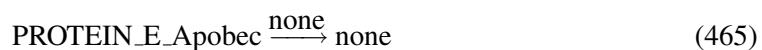
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.177 Reaction PROTEIN\_E\_Apobec\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Apobec\_degradation

## Reaction equation



## Reactant

Table 690: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Apobec	PROTEIN_E_Apobec	

## Modifier

Table 691: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 692: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{177} = P\_protein\_deg \cdot [PROTEIN\_E\_Apobec] \quad (466)$$

Table 693: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.178 Reaction PROTEIN\_E\_Blimp1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Blimp1\_degradation

### Reaction equation



## Reactant

Table 694: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	

## Modifier

Table 695: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 696: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{178} = P\_protein\_deg \cdot [PROTEIN\_E\_Blimp1] \quad (468)$$

Table 697: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.179 Reaction PROTEIN\_E\_Bra\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Bra\_degradation

### Reaction equation



## Reactant

Table 698: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	

## Modifier

Table 699: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 700: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{179} = P\_protein\_deg \cdot [PROTEIN\_E\_Bra] \quad (470)$$

Table 701: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.180 Reaction PROTEIN\_E\_Brn\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Brn\_degradation

## Reaction equation



## Reactant

Table 702: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Brn	PROTEIN_E_Brn	

## Modifier

Table 703: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 704: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{180} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_Brn}] \quad (472)$$

Table 705: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.181 Reaction PROTEIN\_E\_CAPK\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_CAPK\_degradation

**Reaction equation**



**Reactant**

Table 706: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_CAPK	PROTEIN_E_CAPK	

**Modifier**

Table 707: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 708: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{181} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_CAPK}] \quad (474)$$

Table 709: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.182 Reaction PROTEIN\_E\_CyP\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_CyP\_degradation

**Reaction equation**



**Reactant**

Table 710: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_CyP	PROTEIN_E_CyP	

**Modifier**

Table 711: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 712: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{182} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_CyP}] \quad (476)$$

Table 713: Properties of each parameter.

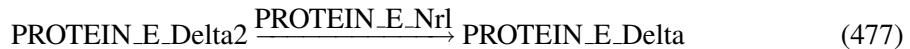
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.183 Reaction PROTEIN\_E\_Delta\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Delta\_activation

#### Reaction equation



#### Reactant

Table 714: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Delta2	PROTEIN_E_Delta2	

#### Modifier

Table 715: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Nr1	PROTEIN_E_Nr1	

#### Product

Table 716: Properties of each product.

Id	Name	SBO
PROTEIN_E_Delta	PROTEIN_E_Delta	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{183} = [\text{PROTEIN\_E\_Delta2}] \cdot [\text{PROTEIN\_E\_Nr1}] \cdot P\_activation\_k \quad (478)$$

Table 717: Properties of each parameter.

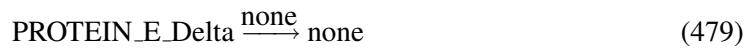
Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.436		<input checked="" type="checkbox"/>

### 7.184 Reaction PROTEIN\_E\_Delta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Delta\_degradation

**Reaction equation**



**Reactant**

Table 718: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Delta	PROTEIN_E_Delta	

**Modifier**

Table 719: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 720: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{184} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_Delta}]$$
 (480)

Table 721: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.185 Reaction PROTEIN\_E\_Delta\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_E\_Delta\_inactivation

#### Reaction equation



#### Reactant

Table 722: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Delta	PROTEIN_E_Delta	

#### Product

Table 723: Properties of each product.

Id	Name	SBO
PROTEIN_E_Delta2	PROTEIN_E_Delta2	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{185} = [\text{PROTEIN\_E\_Delta}] \cdot P_{\text{inactivation\_k}} \quad (482)$$

Table 724: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.840		<input checked="" type="checkbox"/>

### 7.186 Reaction PROTEIN\_E\_Dpt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Dpt\_degradation

#### Reaction equation



#### Reactant

Table 725: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Dpt	PROTEIN_E_Dpt	

#### Modifier

Table 726: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 727: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{186} = P\_protein\_deg \cdot [PROTEIN\_E\_Dpt] \quad (484)$$

Table 728: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.187 Reaction PROTEIN\_E\_Dri\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Dri\_degradation

#### Reaction equation



#### Reactant

Table 729: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Dri	PROTEIN_E_Dri	

#### Modifier

Table 730: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 731: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{187} = P_{protein\_deg} \cdot [PROTEIN\_E\_Dri] \quad (486)$$

Table 732: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.188 Reaction PROTEIN\_E\_ES\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_ES\_degradation

### Reaction equation



### Reactant

Table 733: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_ES	PROTEIN_E_ES	

### Modifier

Table 734: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 735: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{188} = P\_protein\_deg \cdot [PROTEIN\_E\_ES] \quad (488)$$

Table 736: Properties of each parameter.

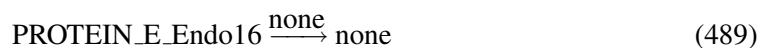
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.189 Reaction PROTEIN\_E\_Endo16\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Endo16\_degradation

### Reaction equation



### Reactant

Table 737: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Endo16	PROTEIN_E_Endo16	

### Modifier

Table 738: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 739: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{189} = P\_protein\_deg \cdot [PROTEIN\_E\_Endo16] \quad (490)$$

Table 740: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.190 Reaction PROTEIN\_E\_Erg\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Erg\_degradation

### Reaction equation



### Reactant

Table 741: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Erg	PROTEIN_E_Erg	

### Modifier

Table 742: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 743: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{190} = P\_protein\_deg \cdot [PROTEIN\_E\_Erg] \quad (492)$$

Table 744: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.191 Reaction PROTEIN\_E\_Ets1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Ets1\_degradation

## Reaction equation



## Reactant

Table 745: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	

## Modifier

Table 746: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 747: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{191} = P\_protein\_deg \cdot [PROTEIN\_E\_Ets1] \quad (494)$$

Table 748: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.192 Reaction PROTEIN\_E\_Eve\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Eve\_degradation

### Reaction equation



## Reactant

Table 749: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Eve	PROTEIN_E_Eve	

## Modifier

Table 750: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 751: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{192} = P\_protein\_deg \cdot [PROTEIN\_E\_Eve] \quad (496)$$

Table 752: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.193 Reaction PROTEIN\_E\_Ficolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Ficolin\_degradation

### Reaction equation



## Reactant

Table 753: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Ficolin	PROTEIN_E_Ficolin	

## Modifier

Table 754: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 755: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{193} = P\_protein\_deg \cdot [PROTEIN\_E\_Ficolin] \quad (498)$$

Table 756: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.194 Reaction PROTEIN\_E\_FoxA\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_FoxA\_degradation

## Reaction equation



## Reactant

Table 757: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_FoxA	PROTEIN_E_FoxA	

## Modifier

Table 758: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 759: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{194} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_FoxA}] \quad (500)$$

Table 760: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.195 Reaction PROTEIN\_E\_FoxB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_FoxB\_degradation

**Reaction equation**



**Reactant**

Table 761: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_FoxB	PROTEIN_E_FoxB	

**Modifier**

Table 762: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 763: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{195} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_FoxB}] \quad (502)$$

Table 764: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.196 Reaction PROTEIN\_E\_FoxN23\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_FoxN23\_degradation

### Reaction equation



### Reactant

Table 765: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_FoxN23	PROTEIN_E_FoxN23	

### Modifier

Table 766: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 767: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{196} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_FoxN23}] \quad (504)$$

Table 768: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.197 Reaction PROTEIN\_E\_FoxO\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_FoxO\_degradation

**Reaction equation**



**Reactant**

Table 769: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_FoxO	PROTEIN_E_FoxO	

**Modifier**

Table 770: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 771: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{197} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_FoxO}] \quad (506)$$

Table 772: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.198 Reaction PROTEIN\_E\_FvMo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_FvMo\_degradation

#### Reaction equation



#### Reactant

Table 773: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_FvMo	PROTEIN_E_FvMo	

#### Modifier

Table 774: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 775: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{198} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_FvMo}] \quad (508)$$

Table 776: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.199 Reaction PROTEIN\_E\_GSK3\_i\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_GSK3\_i\_activation

#### Reaction equation



#### Reactant

Table 777: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_GSK3_a	PROTEIN_E_GSK3_a	

#### Modifier

Table 778: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_frizzled_a	PROTEIN_E_frizzled_a	

#### Product

Table 779: Properties of each product.

Id	Name	SBO
PROTEIN_E_GSK3_i	PROTEIN_E_GSK3_i	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{199} = [\text{PROTEIN\_E\_GSK3\_a}] \cdot [\text{PROTEIN\_E\_frizzled\_a}] \cdot P\_activation\_k \quad (510)$$

Table 780: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.358		<input checked="" type="checkbox"/>

## 7.200 Reaction PROTEIN\_E\_GSK3\_i\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_E\_GSK3\_i\_inactivation

### Reaction equation



### Reactant

Table 781: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_GSK3_i	PROTEIN_E_GSK3_i	

### Product

Table 782: Properties of each product.

Id	Name	SBO
PROTEIN_E_GSK3_a	PROTEIN_E_GSK3_a	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{200} = [\text{PROTEIN\_E\_GSK3\_i}] \cdot P_{\text{inactivation\_k}} \quad (512)$$

Table 783: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.061		<input checked="" type="checkbox"/>

## 7.201 Reaction PROTEIN\_E\_GataC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_GataC\_degradation

**Reaction equation**



**Reactant**

Table 784: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_GataC	PROTEIN_E_GataC	

**Modifier**

Table 785: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 786: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{201} = P\_protein\_deg \cdot [PROTEIN\_E\_GataC] \quad (514)$$

Table 787: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.202 Reaction PROTEIN\_E\_GataE\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_GataE\_degradation

### Reaction equation



### Reactant

Table 788: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	

### Modifier

Table 789: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 790: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{202} = P\_protein\_deg \cdot [PROTEIN\_E\_GataE] \quad (516)$$

Table 791: Properties of each parameter.

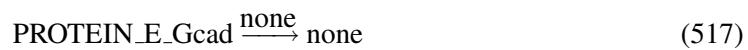
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.203 Reaction PROTEIN\_E\_Gcad\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Gcad\_degradation

### Reaction equation



### Reactant

Table 792: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Gcad	PROTEIN_E_Gcad	

### Modifier

Table 793: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 794: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{203} = P\_protein\_deg \cdot [PROTEIN\_E\_Gcad] \quad (518)$$

Table 795: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.204 Reaction PROTEIN\_E\_Gcm\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Gcm\_degradation

#### Reaction equation



#### Reactant

Table 796: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Gcm	PROTEIN_E_Gcm	

#### Modifier

Table 797: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 798: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{204} = P\_protein\_deg \cdot [PROTEIN\_E\_Gcm] \quad (520)$$

Table 799: Properties of each parameter.

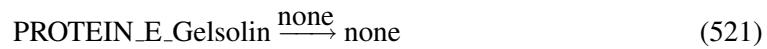
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.205 Reaction PROTEIN\_E\_Gelsolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Gelsolin\_degradation

### Reaction equation



### Reactant

Table 800: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Gelsolin	PROTEIN_E_Gelsolin	

### Modifier

Table 801: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 802: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{205} = P\_protein\_deg \cdot [PROTEIN\_E\_Gelsolin] \quad (522)$$

Table 803: Properties of each parameter.

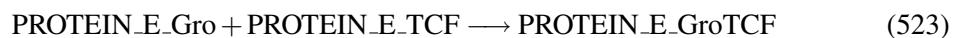
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.206 Reaction PROTEIN\_E\_GroTCF\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_E\_GroTCF\_accociation

### Reaction equation



### Reactants

Table 804: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Gro	PROTEIN_E_Gro	
PROTEIN_E_TCF	PROTEIN_E_TCF	

## Product

Table 805: Properties of each product.

Id	Name	SBO
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{206} = P\_association\_k \cdot [PROTEIN\_E\_Gro] \cdot [PROTEIN\_E\_TCF] \quad (524)$$

Table 806: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.711		<input checked="" type="checkbox"/>

## 7.207 Reaction PROTEIN\_E\_GroTCF\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_E\_GroTCF\_dissociation

### Reaction equation



## Reactant

Table 807: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_GroTCF	PROTEIN_E_GroTCF	

## Products

Table 808: Properties of each product.

Id	Name	SBO
PROTEIN_E_Gro	PROTEIN_E_Gro	
PROTEIN_E_TCF	PROTEIN_E_TCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{207} = P_{\text{dissociation\_k}} \cdot [\text{PROTEIN\_E\_GroTCF}] \quad (526)$$

Table 809: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_dissociation_k			0.945		<input checked="" type="checkbox"/>

## 7.208 Reaction PROTEIN\_E\_HesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_HesC\_degradation

### Reaction equation



### Reactant

Table 810: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_HesC	PROTEIN_E_HesC	

### Modifier

Table 811: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 812: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{208} = P\_protein\_deg \cdot [PROTEIN\_E\_HesC] \quad (528)$$

Table 813: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.209 Reaction PROTEIN\_E\_Hex\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Hex\_degradation

## Reaction equation



## Reactant

Table 814: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Hex	PROTEIN_E_Hex	

## Modifier

Table 815: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 816: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{209} = P\_protein\_deg \cdot [PROTEIN\_E\_Hex] \quad (530)$$

Table 817: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.210 Reaction PROTEIN\_E\_Hnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Hnf6\_degradation

### Reaction equation



## Reactant

Table 818: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	

## Modifier

Table 819: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 820: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{210} = P_{protein\_deg} \cdot [PROTEIN\_E\_Hnf6] \quad (532)$$

Table 821: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.211 Reaction PROTEIN\_E\_Hox\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Hox\_degradation

### Reaction equation



## Reactant

Table 822: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Hox	PROTEIN_E_Hox	

## Modifier

Table 823: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 824: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{211} = P_{protein\_deg} \cdot [PROTEIN\_E\_Hox] \quad (534)$$

Table 825: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.212 Reaction PROTEIN\_E\_Kakapo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Kakapo\_degradation

## Reaction equation



## Reactant

Table 826: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Kakapo	PROTEIN_E_Kakapo	

## Modifier

Table 827: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 828: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{212} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_Kakapo}] \quad (536)$$

Table 829: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.213 Reaction PROTEIN\_E\_Lim\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Lim\_degradation

**Reaction equation**



**Reactant**

Table 830: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Lim	PROTEIN_E_Lim	

**Modifier**

Table 831: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 832: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{213} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_Lim}] \quad (538)$$

Table 833: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.214 Reaction PROTEIN\_E\_Msp130\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Msp130\_degradation

### Reaction equation



### Reactant

Table 834: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Msp130	PROTEIN_E_Msp130	

### Modifier

Table 835: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 836: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{214} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_Msp130}] \quad (540)$$

Table 837: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.215 Reaction PROTEIN\_E\_MspL\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_MspL\_degradation

### Reaction equation



### Reactant

Table 838: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_MspL	PROTEIN_E_MspL	

### Modifier

Table 839: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 840: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{215} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_MspL}] \quad (542)$$

Table 841: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.216 Reaction PROTEIN\_E\_Not\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Not\_degradation

### Reaction equation



### Reactant

Table 842: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Not	PROTEIN_E_Not	

### Modifier

Table 843: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 844: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{216} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_Not}] \quad (544)$$

Table 845: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.217 Reaction PROTEIN\_E\_Notch\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Notch\_activation

#### Reaction equation



#### Reactant

Table 846: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Notch2	PROTEIN_E_Notch2	

#### Modifier

Table 847: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Delta2	PROTEIN_E_Delta2	

#### Product

Table 848: Properties of each product.

Id	Name	SBO
PROTEIN_E_Notch	PROTEIN_E_Notch	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{217} = [\text{PROTEIN\_E\_Notch2}] \cdot [\text{PROTEIN\_E\_Delta2}] \cdot P_{\text{activation\_k}} \quad (546)$$

Table 849: Properties of each parameter.

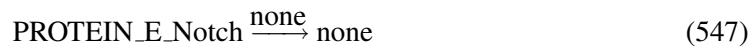
Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.684		<input checked="" type="checkbox"/>

## 7.218 Reaction PROTEIN\_E\_Notch\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Notch\_degradation

### Reaction equation



### Reactant

Table 850: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Notch	PROTEIN_E_Notch	

### Modifier

Table 851: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 852: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{218} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_Notch}] \quad (548)$$

Table 853: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.219 Reaction PROTEIN\_E\_Notch\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_E\_Notch\_inactivation

### Reaction equation



### Reactant

Table 854: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Notch	PROTEIN_E_Notch	

### Product

Table 855: Properties of each product.

Id	Name	SBO
PROTEIN_E_Notch2	PROTEIN_E_Notch2	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{219} = [\text{PROTEIN\_E\_Notch}] \cdot P\text{\_inactivation\_k} \quad (550)$$

Table 856: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.568		<input checked="" type="checkbox"/>

## 7.220 Reaction PROTEIN\_E\_Nrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Nrl\_degradation

### Reaction equation



### Reactant

Table 857: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Nrl	PROTEIN_E_Nrl	

### Modifier

Table 858: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 859: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{220} = P\_protein\_deg \cdot [PROTEIN\_E\_Nrl] \quad (552)$$

Table 860: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.221 Reaction PROTEIN\_E\_OrCt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_OrCt\_degradation

### Reaction equation



### Reactant

Table 861: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_OrCt	PROTEIN_E_OrCt	

### Modifier

Table 862: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 863: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{221} = P\_protein\_deg \cdot [PROTEIN\_E\_OrCt] \quad (554)$$

Table 864: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.222 Reaction PROTEIN\_E\_Otx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Otx\_degradation

### Reaction equation



### Reactant

Table 865: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Otx	PROTEIN_E_Otx	

### Modifier

Table 866: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 867: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{222} = P\_protein\_deg \cdot [PROTEIN\_E\_Otx] \quad (556)$$

Table 868: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

### 7.223 Reaction PROTEIN\_E\_Pks\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Pks\_degradation

#### Reaction equation



#### Reactant

Table 869: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Pks	PROTEIN_E_Pks	

#### Modifier

Table 870: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 871: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{223} = P_{protein\_deg} \cdot [PROTEIN\_E\_Pks] \quad (558)$$

Table 872: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.224 Reaction PROTEIN\_E\_Pmar1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Pmar1\_degradation

### Reaction equation



### Reactant

Table 873: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Pmar1	PROTEIN_E_Pmar1	

### Modifier

Table 874: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 875: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{224} = P\_protein\_deg \cdot [PROTEIN\_E\_Pmar1] \quad (560)$$

Table 876: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.225 Reaction PROTEIN\_E\_Sm27\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Sm27\_degradation

## Reaction equation



## Reactant

Table 877: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Sm27	PROTEIN_E_Sm27	

## Modifier

Table 878: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 879: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{225} = P\_protein\_deg \cdot [PROTEIN\_E\_Sm27] \quad (562)$$

Table 880: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.226 Reaction PROTEIN\_E\_Sm30\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Sm30\_degradation

### Reaction equation



## Reactant

Table 881: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Sm30	PROTEIN_E_Sm30	

## Modifier

Table 882: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 883: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{226} = P_{protein\_deg} \cdot [PROTEIN\_E\_Sm30] \quad (564)$$

Table 884: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.227 Reaction PROTEIN\_E\_Sm50\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Sm50\_degradation

### Reaction equation



## Reactant

Table 885: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Sm50	PROTEIN_E_Sm50	

## Modifier

Table 886: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 887: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{227} = P_{protein\_deg} \cdot [PROTEIN\_E\_Sm50] \quad (566)$$

Table 888: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.228 Reaction PROTEIN\_E\_Snail\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Snail\_degradation

## Reaction equation



## Reactant

Table 889: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Snail	PROTEIN_E_Snail	

## Modifier

Table 890: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 891: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{228} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_Snail}] \quad (568)$$

Table 892: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.229 Reaction PROTEIN\_E\_SoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_SoxB1\_degradation

**Reaction equation**



**Reactant**

Table 893: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_SoxB1	PROTEIN_E_SoxB1	

**Modifier**

Table 894: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 895: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{229} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_SoxB1}] \quad (570)$$

Table 896: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.230 Reaction PROTEIN\_E\_SoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_SoxC\_degradation

**Reaction equation**



**Reactant**

Table 897: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_SoxC	PROTEIN_E_SoxC	

**Modifier**

Table 898: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 899: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{230} = P_{protein\_deg} \cdot [\text{PROTEIN\_E\_SoxC}] \quad (572)$$

Table 900: Properties of each parameter.

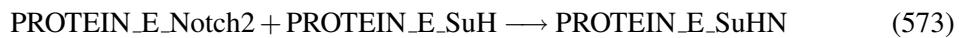
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.231 Reaction PROTEIN\_E\_SuHN\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_E\_SuHN\_accociation

#### Reaction equation



#### Reactants

Table 901: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Notch2	PROTEIN_E_Notch2	
PROTEIN_E_SuH	PROTEIN_E_SuH	

#### Product

Table 902: Properties of each product.

Id	Name	SBO
PROTEIN_E_SuHN	PROTEIN_E_SuHN	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{231} = P_{association\_k} \cdot [\text{PROTEIN\_E\_Notch2}] \cdot [\text{PROTEIN\_E\_SuH}] \quad (574)$$

Table 903: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.727		<input checked="" type="checkbox"/>

## 7.232 Reaction PROTEIN\_E\_SuHN\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_E\_SuHN\_dissociation

### Reaction equation



### Reactant

Table 904: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_SuHN	PROTEIN_E_SuHN	

### Products

Table 905: Properties of each product.

Id	Name	SBO
PROTEIN_E_Notch2	PROTEIN_E_Notch2	
PROTEIN_E_SuH	PROTEIN_E_SuH	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{232} = P_{\text{dissociation}} \cdot k \cdot [\text{PROTEIN\_E\_SuHN}] \quad (576)$$

Table 906: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.051		<input checked="" type="checkbox"/>

### 7.233 Reaction PROTEIN\_E\_SuH\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_SuH\_degradation

#### Reaction equation



#### Reactant

Table 907: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_SuH	PROTEIN_E_SuH	

#### Modifier

Table 908: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 909: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{233} = P\_protein\_deg \cdot [PROTEIN\_E\_SuH] \quad (578)$$

Table 910: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.234 Reaction PROTEIN\_E\_SuTx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_SuTx\_degradation

#### Reaction equation



#### Reactant

Table 911: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_SuTx	PROTEIN_E_SuTx	

#### Modifier

Table 912: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 913: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{234} = P_{protein\_deg} \cdot [PROTEIN\_E\_SuTx] \quad (580)$$

Table 914: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.235 Reaction PROTEIN\_E\_TBr\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_TBr\_degradation

### Reaction equation



### Reactant

Table 915: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_TBr	PROTEIN_E_TBr	

### Modifier

Table 916: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 917: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{235} = P_{protein\_deg} \cdot [PROTEIN\_E\_TBr] \quad (582)$$

Table 918: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.236 Reaction PROTEIN\_E\_Tel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Tel\_degradation

### Reaction equation



### Reactant

Table 919: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Tel	PROTEIN_E_Tel	

### Modifier

Table 920: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 921: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{236} = P\_protein\_deg \cdot [PROTEIN\_E\_Tel] \quad (584)$$

Table 922: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.237 Reaction PROTEIN\_E\_Tgif\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Tgif\_degradation

### Reaction equation



### Reactant

Table 923: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Tgif	PROTEIN_E_Tgif	

### Modifier

Table 924: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 925: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{237} = P\_protein\_deg \cdot [PROTEIN\_E\_Tgif] \quad (586)$$

Table 926: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.238 Reaction PROTEIN\_E\_UMR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_UMR\_degradation

## Reaction equation



## Reactant

Table 927: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_UMR	PROTEIN_E_UMR	

## Modifier

Table 928: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 929: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{238} = P\_protein\_deg \cdot [PROTEIN\_E\_UMR] \quad (588)$$

Table 930: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.239 Reaction PROTEIN\_E\_UVA0tx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_UVA0tx\_degradation

### Reaction equation



## Reactant

Table 931: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_UVA0tx	PROTEIN_E_UVA0tx	

## Modifier

Table 932: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 933: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{239} = P\_protein\_deg \cdot [PROTEIN\_E\_UVA0tx] \quad (590)$$

Table 934: Properties of each parameter.

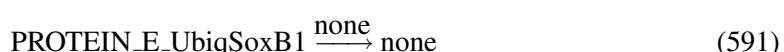
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.240 Reaction PROTEIN\_E\_UbiqSoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_UbiqSoxB1\_degradation

### Reaction equation



## Reactant

Table 935: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_UbiqSoxB1	PROTEIN_E_UbiqSoxB1	

## Modifier

Table 936: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 937: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{240} = P_{protein\_deg} \cdot [PROTEIN\_E\_UbiqSoxB1] \quad (592)$$

Table 938: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.241 Reaction PROTEIN\_E\_VEGFR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_VEGFR\_degradation

## Reaction equation



## Reactant

Table 939: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_VEGFR	PROTEIN_E_VEGFR	

## Modifier

Table 940: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 941: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{241} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_VEGFR}] \quad (594)$$

Table 942: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.242 Reaction PROTEIN\_E\_VEGFSignal\_accociation\_0

This is an irreversible reaction of three reactants forming one product.

**Name** PROTEIN\_E\_VEGFSignal\_association

**Reaction equation**



**Reactants**

Table 943: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_L1	PROTEIN_E_L1	
PROTEIN_E_VEGFR	PROTEIN_E_VEGFR	
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

**Product**

Table 944: Properties of each product.

Id	Name	SBO
PROTEIN_E_VEGFSignal	PROTEIN_E_VEGFSignal	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{242} = P_{\text{association\_k}} \cdot [\text{PROTEIN\_E\_L1}] \cdot [\text{PROTEIN\_E\_VEGFR}] \cdot [\text{PROTEIN\_E\_VEGF}]$$
(596)

Table 945: Properties of each parameter.

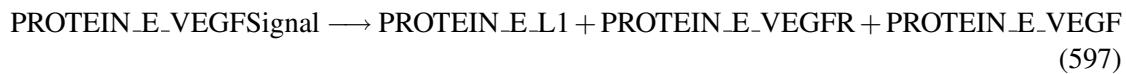
Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.362		<input checked="" type="checkbox"/>

**7.243 Reaction PROTEIN\_E\_VEGFSignal\_dissociation\_0**

This is an irreversible reaction of one reactant forming three products.

**Name** PROTEIN\_E\_VEGFSignal\_dissociation

### Reaction equation



### Reactant

Table 946: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_VEGFSignal	PROTEIN_E_VEGFSignal	

### Products

Table 947: Properties of each product.

Id	Name	SBO
PROTEIN_E_L1	PROTEIN_E_L1	
PROTEIN_E_VEGFR	PROTEIN_E_VEGFR	
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{243} = P_{\text{dissociation\_k}} \cdot [\text{PROTEIN\_E\_VEGFSignal}]$$
 (598)

Table 948: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_dissociation_k			0.589		<input checked="" type="checkbox"/>

### 7.244 Reaction PROTEIN\_E\_VEGF\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_VEGF\_degradation

## Reaction equation



## Reactant

Table 949: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

## Modifier

Table 950: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 951: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{244} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_VEGF}] \quad (600)$$

Table 952: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.245 Reaction PROTEIN\_E\_Wnt8\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_Wnt8\_degradation

**Reaction equation**



**Reactant**

Table 953: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_Wnt8	PROTEIN_E_Wnt8	

**Modifier**

Table 954: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 955: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{245} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_Wnt8}] \quad (602)$$

Table 956: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.246 Reaction PROTEIN\_E\_cB\_a\_degradation\_0

This is an irreversible reaction of one reactant forming no product influenced by one modifier.

**Name** PROTEIN\_E\_cB\_a\_degradation

**Reaction equation**



**Reactant**

Table 957: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_cB	PROTEIN_E_cB	

**Modifier**

Table 958: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_GSK3_a	PROTEIN_E_GSK3_a	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{246} = [\text{PROTEIN\_E\_cB}] \cdot [\text{PROTEIN\_E\_GSK3\_a}] \cdot P_{\text{adeg\_k}} \quad (604)$$

Table 959: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_adeg_k			0.883		<input checked="" type="checkbox"/>

## 7.247 Reaction PROTEIN\_E\_cB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_cB\_degradation

## Reaction equation



## Reactant

Table 960: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_cB	PROTEIN_E_cB	

## Modifier

Table 961: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 962: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{247} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_E\_cB}] \quad (606)$$

Table 963: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.248 Reaction PROTEIN\_E\_frizzled\_a\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_frizzled\_a\_activation

**Reaction equation**



**Reactant**

Table 964: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_frizzled_i	PROTEIN_E_frizzled_i	

**Modifier**

Table 965: Properties of each modifier.

Id	Name	SBO
PROTEIN_E_Wnt8	PROTEIN_E_Wnt8	

**Product**

Table 966: Properties of each product.

Id	Name	SBO
PROTEIN_E_frizzled_a	PROTEIN_E_frizzled_a	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{248} = [\text{PROTEIN\_E\_frizzled\_i}] \cdot [\text{PROTEIN\_E\_Wnt8}] \cdot P\_activation\_k \quad (608)$$

Table 967: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.851		<input checked="" type="checkbox"/>

## 7.249 Reaction PROTEIN\_E\_frizzled\_a\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_E\_frizzled\_a\_inactivation

### Reaction equation



### Reactant

Table 968: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_frizzled_a	PROTEIN_E_frizzled_a	

### Product

Table 969: Properties of each product.

Id	Name	SBO
PROTEIN_E_frizzled_i	PROTEIN_E_frizzled_i	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{249} = [\text{PROTEIN\_E\_frizzled\_a}] \cdot P_{\text{inactivation\_k}} \quad (610)$$

Table 970: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_inactivation_k			0.191		<input checked="" type="checkbox"/>

## 7.250 Reaction PROTEIN\_E\_nBTF\_C\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_E\_nBTF\_C\_accociation

### Reaction equation



### Reactants

Table 971: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_cB	PROTEIN_E_cB	
PROTEIN_E_TCF	PROTEIN_E_TCF	

### Product

Table 972: Properties of each product.

Id	Name	SBO
PROTEIN_E_nBCF	PROTEIN_E_nBCF	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{250} = P_{\text{association\_k}} \cdot [\text{PROTEIN\_E\_cB}] \cdot [\text{PROTEIN\_E\_TCF}] \quad (612)$$

Table 973: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_association_k			0.329		<input checked="" type="checkbox"/>

### 7.251 Reaction PROTEIN\_E\_nBCF\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_E\_nBCF\_dissociation

### Reaction equation



## Reactant

Table 974: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_nBTcf	PROTEIN_E_nBTcf	

## Products

Table 975: Properties of each product.

Id	Name	SBO
PROTEIN_E_cB	PROTEIN_E_cB	
PROTEIN_E_TCF	PROTEIN_E_TCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{251} = P_{\text{dissociation\_k}} \cdot [\text{PROTEIN\_E\_nBTcf}] \quad (614)$$

Table 976: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_dissociation_k			0.382		<input checked="" type="checkbox"/>

## 7.252 Reaction PROTEIN\_E\_z13\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_E\_z13\_degradation

### Reaction equation



## Reactant

Table 977: Properties of each reactant.

Id	Name	SBO
PROTEIN_E_z13	PROTEIN_E_z13	

## Modifier

Table 978: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 979: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{252} = P_{protein\_deg} \cdot [PROTEIN\_E\_z13] \quad (616)$$

Table 980: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.253 Reaction PROTEIN\_M\_Alx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Alx1\_degradation

### Reaction equation



## Reactant

Table 981: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Alx1	PROTEIN_M_Alx1	

## Modifier

Table 982: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 983: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{253} = P_{protein\_deg} \cdot [PROTEIN\_M\_Alx1] \quad (618)$$

Table 984: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.254 Reaction PROTEIN\_M\_Apobec\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Apobec\_degradation

## Reaction equation



## Reactant

Table 985: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Apobec	PROTEIN_M_Apobec	

## Modifier

Table 986: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 987: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{254} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_Apobec}] \quad (620)$$

Table 988: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.255 Reaction PROTEIN\_M\_Blimp1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Blimp1\_degradation

**Reaction equation**



**Reactant**

Table 989: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	

**Modifier**

Table 990: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 991: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{255} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Blimp1}] \quad (622)$$

Table 992: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.256 Reaction PROTEIN\_M\_Bra\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Bra\_degradation

**Reaction equation**



**Reactant**

Table 993: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Bra	PROTEIN_M_Bra	

**Modifier**

Table 994: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 995: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{256} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_Bra}] \quad (624)$$

Table 996: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.257 Reaction PROTEIN\_M\_Brn\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Brn\_degradation

**Reaction equation**



**Reactant**

Table 997: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Brn	PROTEIN_M_Brn	

**Modifier**

Table 998: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 999: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{257} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Brn}] \quad (626)$$

Table 1000: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.258 Reaction PROTEIN\_M\_CAPK\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_CAPK\_degradation

### Reaction equation



### Reactant

Table 1001: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_CAPK	PROTEIN_M_CAPK	

### Modifier

Table 1002: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1003: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{258} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_CAPK}]$$
 (628)

Table 1004: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.259 Reaction PROTEIN\_M\_CyP\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_CyP\_degradation

### Reaction equation



### Reactant

Table 1005: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_CyP	PROTEIN_M_CyP	

### Modifier

Table 1006: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1007: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{259} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_CyP}]$$
 (630)

Table 1008: Properties of each parameter.

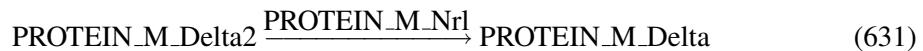
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.260 Reaction PROTEIN\_M\_Delta\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Delta\_activation

### Reaction equation



### Reactant

Table 1009: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Delta2	PROTEIN_M_Delta2	

### Modifier

Table 1010: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Nrl	PROTEIN_M_Nrl	

### Product

Table 1011: Properties of each product.

Id	Name	SBO
PROTEIN_M_Delta	PROTEIN_M_Delta	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{260} = [\text{PROTEIN\_M\_Delta2}] \cdot [\text{PROTEIN\_M\_Nrl}] \cdot P_{\text{activation\_k}} \quad (632)$$

Table 1012: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.436		<input checked="" type="checkbox"/>

## 7.261 Reaction PROTEIN\_M\_Delta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Delta\_degradation

### Reaction equation



### Reactant

Table 1013: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Delta	PROTEIN_M_Delta	

### Modifier

Table 1014: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1015: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{261} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Delta}]$$
 (634)

Table 1016: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.262 Reaction PROTEIN\_M\_Delta\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_M\_Delta\_inactivation

### Reaction equation



### Reactant

Table 1017: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Delta	PROTEIN_M_Delta	

### Product

Table 1018: Properties of each product.

Id	Name	SBO
PROTEIN_M_Delta2	PROTEIN_M_Delta2	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{262} = [\text{PROTEIN\_M\_Delta}] \cdot P_{\text{inactivation\_k}} \quad (636)$$

Table 1019: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.840		<input checked="" type="checkbox"/>

### 7.263 Reaction PROTEIN\_M\_Dpt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Dpt\_degradation

#### Reaction equation



#### Reactant

Table 1020: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Dpt	PROTEIN_M_Dpt	

#### Modifier

Table 1021: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1022: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{263} = P\_protein\_deg \cdot [PROTEIN\_M\_Dpt] \quad (638)$$

Table 1023: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.264 Reaction PROTEIN\_M\_Dri\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Dri\_degradation

### Reaction equation



### Reactant

Table 1024: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Dri	PROTEIN_M_Dri	

### Modifier

Table 1025: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1026: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{264} = P\_protein\_deg \cdot [PROTEIN\_M\_Dri] \quad (640)$$

Table 1027: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.265 Reaction PROTEIN\_M\_Endo16\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Endo16\_degradation

### Reaction equation



### Reactant

Table 1028: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Endo16	PROTEIN_M_Endo16	

### Modifier

Table 1029: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1030: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{265} = P\_protein\_deg \cdot [PROTEIN\_M\_Endo16] \quad (642)$$

Table 1031: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.266 Reaction PROTEIN\_M\_Erg\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Erg\_degradation

#### Reaction equation



#### Reactant

Table 1032: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Erg	PROTEIN_M_Erg	

#### Modifier

Table 1033: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1034: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{266} = P\_protein\_deg \cdot [PROTEIN\_M\_Erg] \quad (644)$$

Table 1035: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.267 Reaction PROTEIN\_M\_Ets1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Ets1\_degradation

### Reaction equation



### Reactant

Table 1036: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	

### Modifier

Table 1037: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1038: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{267} = P\_protein\_deg \cdot [PROTEIN\_M\_Ets1] \quad (646)$$

Table 1039: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.268 Reaction PROTEIN\_M\_Eve\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Eve\_degradation

### Reaction equation



## Reactant

Table 1040: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Eve	PROTEIN_M_Eve	

## Modifier

Table 1041: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1042: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{268} = P\_protein\_deg \cdot [PROTEIN\_M\_Eve] \quad (648)$$

Table 1043: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.269 Reaction PROTEIN\_M\_Ficolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Ficolin\_degradation

### Reaction equation



## Reactant

Table 1044: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Ficolin	PROTEIN_M_Ficolin	

## Modifier

Table 1045: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1046: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{269} = P\_protein\_deg \cdot [PROTEIN\_M\_Ficolin] \quad (650)$$

Table 1047: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.270 Reaction PROTEIN\_M\_FoxA\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_FoxA\_degradation

### Reaction equation



## Reactant

Table 1048: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_FoxA	PROTEIN_M_FoxA	

## Modifier

Table 1049: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1050: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{270} = P\_protein\_deg \cdot [PROTEIN\_M\_FoxA] \quad (652)$$

Table 1051: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.271 Reaction PROTEIN\_M\_FoxB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_FoxB\_degradation

## Reaction equation



## Reactant

Table 1052: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_FoxB	PROTEIN_M_FoxB	

## Modifier

Table 1053: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1054: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{271} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_FoxB}] \quad (654)$$

Table 1055: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.272 Reaction PROTEIN\_M\_FoxN23\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_FoxN23\_degradation

**Reaction equation**



**Reactant**

Table 1056: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_FoxN23	PROTEIN_M_FoxN23	

**Modifier**

Table 1057: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1058: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{272} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_FoxN23}] \quad (656)$$

Table 1059: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.273 Reaction PROTEIN\_M\_FoxO\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_FoxO\_degradation

**Reaction equation**



**Reactant**

Table 1060: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Fox0	PROTEIN_M_FoxO	

**Modifier**

Table 1061: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1062: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{273} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_FoxO}] \quad (658)$$

Table 1063: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.274 Reaction PROTEIN\_M\_FvMo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_FvMo\_degradation

### Reaction equation



### Reactant

Table 1064: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_FvMo	PROTEIN_M_FvMo	

### Modifier

Table 1065: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1066: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{274} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_FvMo}] \quad (660)$$

Table 1067: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.275 Reaction PROTEIN\_M\_GSK3\_i\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_GSK3\_i\_activation

### Reaction equation



### Reactant

Table 1068: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_GSK3_a	PROTEIN_M_GSK3_a	

### Modifier

Table 1069: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_frizzled_a	PROTEIN_M_frizzled_a	

### Product

Table 1070: Properties of each product.

Id	Name	SBO
PROTEIN_M_GSK3_i	PROTEIN_M_GSK3_i	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{275} = [\text{PROTEIN\_M\_GSK3\_a}] \cdot [\text{PROTEIN\_M\_frizzled\_a}] \cdot P_{\text{activation\_k}} \quad (662)$$

Table 1071: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.358		<input checked="" type="checkbox"/>

## 7.276 Reaction PROTEIN\_M\_GSK3\_i\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_M\_GSK3\_i\_inactivation

### Reaction equation



### Reactant

Table 1072: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_GSK3_i	PROTEIN_M_GSK3_i	

### Product

Table 1073: Properties of each product.

Id	Name	SBO
PROTEIN_M_GSK3_a	PROTEIN_M_GSK3_a	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{276} = [\text{PROTEIN\_M\_GSK3\_i}] \cdot P_{\text{inactivation\_k}} \quad (664)$$

Table 1074: Properties of each parameter.

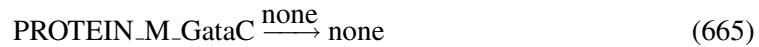
Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.061		<input checked="" type="checkbox"/>

### 7.277 Reaction PROTEIN\_M\_GataC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_GataC\_degradation

#### Reaction equation



#### Reactant

Table 1075: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_GataC	PROTEIN_M_GataC	

#### Modifier

Table 1076: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1077: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{277} = P\_protein\_deg \cdot [PROTEIN\_M\_GataC] \quad (666)$$

Table 1078: Properties of each parameter.

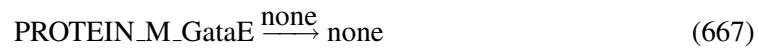
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.278 Reaction PROTEIN\_M\_GataE\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_GataE\_degradation

### Reaction equation



### Reactant

Table 1079: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	

### Modifier

Table 1080: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1081: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{278} = P\_protein\_deg \cdot [PROTEIN\_M\_GataE] \quad (668)$$

Table 1082: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.279 Reaction PROTEIN\_M\_Gcad\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Gcad\_degradation

### Reaction equation



### Reactant

Table 1083: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Gcad	PROTEIN_M_Gcad	

### Modifier

Table 1084: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1085: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{279} = P\_protein\_deg \cdot [PROTEIN\_M\_Gcad] \quad (670)$$

Table 1086: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.280 Reaction PROTEIN\_M\_Gcm\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Gcm\_degradation

### Reaction equation



### Reactant

Table 1087: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Gcm	PROTEIN_M_Gcm	

### Modifier

Table 1088: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1089: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{280} = P\_protein\_deg \cdot [PROTEIN\_M\_Gcm] \quad (672)$$

Table 1090: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.281 Reaction PROTEIN\_M\_Gelsolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Gelsolin\_degradation

### Reaction equation



### Reactant

Table 1091: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Gelsolin	PROTEIN_M_Gelsolin	

### Modifier

Table 1092: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1093: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{281} = P\_protein\_deg \cdot [PROTEIN\_M\_Gelsolin] \quad (674)$$

Table 1094: Properties of each parameter.

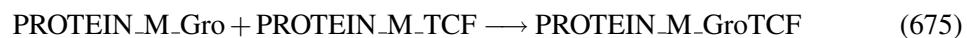
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.282 Reaction PROTEIN\_M\_GroTCF\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_M\_GroTCF\_accociation

## Reaction equation



## Reactants

Table 1095: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Gro	PROTEIN_M_Gro	
PROTEIN_M_TCF	PROTEIN_M_TCF	

## Product

Table 1096: Properties of each product.

Id	Name	SBO
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{282} = P\_association\_k \cdot [PROTEIN\_M\_Gro] \cdot [PROTEIN\_M\_TCF] \quad (676)$$

Table 1097: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.711		<input checked="" type="checkbox"/>

## 7.283 Reaction PROTEIN\_M\_GroTCF\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_M\_GroTCF\_dissociation

### Reaction equation



## Reactant

Table 1098: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_GroTCF	PROTEIN_M_GroTCF	

## Products

Table 1099: Properties of each product.

Id	Name	SBO
PROTEIN_M_Gro	PROTEIN_M_Gro	
PROTEIN_M_TCF	PROTEIN_M_TCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{283} = P_{\text{dissociation\_k}} \cdot [\text{PROTEIN\_M\_GroTCF}] \quad (678)$$

Table 1100: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_dissociation_k			0.945		<input checked="" type="checkbox"/>

## 7.284 Reaction PROTEIN\_M\_HesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_HesC\_degradation

### Reaction equation



### Reactant

Table 1101: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_HesC	PROTEIN_M_HesC	

### Modifier

Table 1102: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1103: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{284} = P\_protein\_deg \cdot [PROTEIN\_M\_HesC] \quad (680)$$

Table 1104: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.285 Reaction PROTEIN\_M\_Hex\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Hex\_degradation

## Reaction equation



## Reactant

Table 1105: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Hex	PROTEIN_M_Hex	

## Modifier

Table 1106: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1107: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{285} = P\_protein\_deg \cdot [PROTEIN\_M\_Hex] \quad (682)$$

Table 1108: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.286 Reaction PROTEIN\_M\_Hnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Hnf6\_degradation

### Reaction equation



### Reactant

Table 1109: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	

## Modifier

Table 1110: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1111: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{286} = P\_protein\_deg \cdot [PROTEIN\_M\_Hnf6] \quad (684)$$

Table 1112: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.287 Reaction PROTEIN\_M\_Hox\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Hox\_degradation

### Reaction equation



## Reactant

Table 1113: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Hox	PROTEIN_M_Hox	

## Modifier

Table 1114: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1115: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{287} = P_{protein\_deg} \cdot [PROTEIN\_M\_Hox] \quad (686)$$

Table 1116: Properties of each parameter.

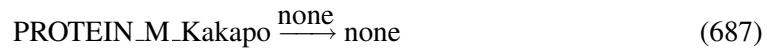
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.288 Reaction PROTEIN\_M\_Kakapo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Kakapo\_degradation

## Reaction equation



## Reactant

Table 1117: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Kakapo	PROTEIN_M_Kakapo	

## Modifier

Table 1118: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1119: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{288} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_Kakapo}] \quad (688)$$

Table 1120: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.289 Reaction PROTEIN\_M\_Lim\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Lim\_degradation

**Reaction equation**



**Reactant**

Table 1121: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Lim	PROTEIN_M_Lim	

**Modifier**

Table 1122: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1123: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{289} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_Lim}] \quad (690)$$

Table 1124: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.290 Reaction PROTEIN\_M\_Msp130\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Msp130\_degradation

### Reaction equation



### Reactant

Table 1125: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Msp130	PROTEIN_M_Msp130	

### Modifier

Table 1126: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1127: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{290} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Msp130}] \quad (692)$$

Table 1128: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.291 Reaction PROTEIN\_M\_MspL\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_MspL\_degradation

### Reaction equation



### Reactant

Table 1129: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_MspL	PROTEIN_M_MspL	

### Modifier

Table 1130: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1131: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{291} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_MspL}] \quad (694)$$

Table 1132: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.292 Reaction PROTEIN\_M\_Not\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Not\_degradation

**Reaction equation**



**Reactant**

Table 1133: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Not	PROTEIN_M_Not	

**Modifier**

Table 1134: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1135: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{292} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Not}] \quad (696)$$

Table 1136: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.293 Reaction PROTEIN\_M\_Notch\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Notch\_activation

#### Reaction equation



#### Reactant

Table 1137: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Notch2	PROTEIN_M_Notch2	

#### Modifier

Table 1138: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Delta2	PROTEIN_M_Delta2	

#### Product

Table 1139: Properties of each product.

Id	Name	SBO
PROTEIN_M_Notch	PROTEIN_M_Notch	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{293} = [\text{PROTEIN\_M\_Notch2}] \cdot [\text{PROTEIN\_M\_Delta2}] \cdot P\_activation\_k \quad (698)$$

Table 1140: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.684		<input checked="" type="checkbox"/>

## 7.294 Reaction PROTEIN\_M\_Notch\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Notch\_degradation

### Reaction equation



### Reactant

Table 1141: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Notch	PROTEIN_M_Notch	

### Modifier

Table 1142: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1143: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{294} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Notch}] \quad (700)$$

Table 1144: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.295 Reaction PROTEIN\_M\_Notch\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_M\_Notch\_inactivation

### Reaction equation



### Reactant

Table 1145: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Notch	PROTEIN_M_Notch	

### Product

Table 1146: Properties of each product.

Id	Name	SBO
PROTEIN_M_Notch2	PROTEIN_M_Notch2	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{295} = [\text{PROTEIN\_M\_Notch}] \cdot P\_inactivation\_k \quad (702)$$

Table 1147: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.568		<input checked="" type="checkbox"/>

## 7.296 Reaction PROTEIN\_M\_Nrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Nrl\_degradation

### Reaction equation



### Reactant

Table 1148: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Nrl	PROTEIN_M_Nrl	

### Modifier

Table 1149: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1150: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{296} = P\_protein\_deg \cdot [PROTEIN\_M\_NrI] \quad (704)$$

Table 1151: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.297 Reaction PROTEIN\_M\_OrCt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_OrCt\_degradation

### Reaction equation



### Reactant

Table 1152: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_OrCt	PROTEIN_M_OrCt	

### Modifier

Table 1153: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1154: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{297} = P\_protein\_deg \cdot [PROTEIN\_M\_OrCt] \quad (706)$$

Table 1155: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.298 Reaction PROTEIN\_M\_Otx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Otx\_degradation

### Reaction equation



### Reactant

Table 1156: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Otx	PROTEIN_M_Otx	

### Modifier

Table 1157: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1158: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{298} = P_{protein\_deg} \cdot [PROTEIN\_M\_Otx] \quad (708)$$

Table 1159: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.299 Reaction PROTEIN\_M\_Pks\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Pks\_degradation

#### Reaction equation



#### Reactant

Table 1160: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Pks	PROTEIN_M_Pks	

#### Modifier

Table 1161: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1162: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{299} = P\_protein\_deg \cdot [PROTEIN\_M\_Pks] \quad (710)$$

Table 1163: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.300 Reaction PROTEIN\_M\_Pmar1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Pmar1\_degradation

### Reaction equation



### Reactant

Table 1164: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Pmar1	PROTEIN_M_Pmar1	

### Modifier

Table 1165: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1166: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{300} = P\_protein\_deg \cdot [PROTEIN\_M\_Pmar1] \quad (712)$$

Table 1167: Properties of each parameter.

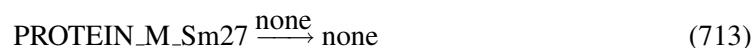
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.301 Reaction PROTEIN\_M\_Sm27\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Sm27\_degradation

## Reaction equation



## Reactant

Table 1168: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Sm27	PROTEIN_M_Sm27	

## Modifier

Table 1169: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1170: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{301} = P\_protein\_deg \cdot [PROTEIN\_M\_Sm27] \quad (714)$$

Table 1171: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.302 Reaction PROTEIN\_M\_Sm30\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Sm30\_degradation

### Reaction equation



## Reactant

Table 1172: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Sm30	PROTEIN_M_Sm30	

## Modifier

Table 1173: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1174: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{302} = P\_protein\_deg \cdot [PROTEIN\_M\_Sm30] \quad (716)$$

Table 1175: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.303 Reaction PROTEIN\_M\_Sm50\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Sm50\_degradation

### Reaction equation



## Reactant

Table 1176: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Sm50	PROTEIN_M_Sm50	

## Modifier

Table 1177: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1178: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{303} = P\_protein\_deg \cdot [PROTEIN\_M\_Sm50] \quad (718)$$

Table 1179: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.304 Reaction PROTEIN\_M\_Snail\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Snail\_degradation

## Reaction equation



## Reactant

Table 1180: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Snail	PROTEIN_M_Snail	

## Modifier

Table 1181: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1182: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{304} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_Snail}] \quad (720)$$

Table 1183: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.305 Reaction PROTEIN\_M\_SoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_SoxB1\_degradation

**Reaction equation**



**Reactant**

Table 1184: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_SoxB1	PROTEIN_M_SoxB1	

**Modifier**

Table 1185: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1186: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{305} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_SoxB1}] \quad (722)$$

Table 1187: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.306 Reaction PROTEIN\_M\_SoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_SoxC\_degradation

**Reaction equation**



**Reactant**

Table 1188: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_SoxC	PROTEIN_M_SoxC	

**Modifier**

Table 1189: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1190: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{306} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_SoxC}] \quad (724)$$

Table 1191: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.307 Reaction PROTEIN\_M\_SuHN\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_M\_SuHN\_accociation

#### Reaction equation



#### Reactants

Table 1192: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Notch2	PROTEIN_M_Notch2	
PROTEIN_M_SuH	PROTEIN_M_SuH	

#### Product

Table 1193: Properties of each product.

Id	Name	SBO
PROTEIN_M_SuHN	PROTEIN_M_SuHN	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{307} = P_{association\_k} \cdot [\text{PROTEIN\_M\_Notch2}] \cdot [\text{PROTEIN\_M\_SuH}] \quad (726)$$

Table 1194: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.727		<input checked="" type="checkbox"/>

### 7.308 Reaction PROTEIN\_M\_SuHN\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_M\_SuHN\_dissociation

#### Reaction equation



#### Reactant

Table 1195: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_SuHN	PROTEIN_M_SuHN	

#### Products

Table 1196: Properties of each product.

Id	Name	SBO
PROTEIN_M_Notch2	PROTEIN_M_Notch2	
PROTEIN_M_SuH	PROTEIN_M_SuH	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{308} = P_{\text{dissociation\_k}} \cdot [\text{PROTEIN\_M\_SuHN}] \quad (728)$$

Table 1197: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.051		<input checked="" type="checkbox"/>

### 7.309 Reaction PROTEIN\_M\_SuH\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_SuH\_degradation

#### Reaction equation



#### Reactant

Table 1198: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_SuH	PROTEIN_M_SuH	

#### Modifier

Table 1199: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1200: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{309} = P\_protein\_deg \cdot [PROTEIN\_M\_SuH] \quad (730)$$

Table 1201: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.310 Reaction PROTEIN\_M\_SuTx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_SuTx\_degradation

#### Reaction equation



#### Reactant

Table 1202: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_SuTx	PROTEIN_M_SuTx	

#### Modifier

Table 1203: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1204: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{310} = P\_protein\_deg \cdot [PROTEIN\_M\_SuTx] \quad (732)$$

Table 1205: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.311 Reaction PROTEIN\_M\_TBr\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_TBr\_degradation

### Reaction equation



### Reactant

Table 1206: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_TBr	PROTEIN_M_TBr	

### Modifier

Table 1207: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1208: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{311} = P\_protein\_deg \cdot [PROTEIN\_M\_TBr] \quad (734)$$

Table 1209: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

### 7.312 Reaction PROTEIN\_M\_Tel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Tel\_degradation

#### Reaction equation



#### Reactant

Table 1210: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Tel	PROTEIN_M_Tel	

#### Modifier

Table 1211: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1212: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{312} = P_{protein\_deg} \cdot [PROTEIN\_M\_Tel] \quad (736)$$

Table 1213: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.313 Reaction PROTEIN\_M\_Tgif\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Tgif\_degradation

### Reaction equation



## Reactant

Table 1214: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Tgif	PROTEIN_M_Tgif	

## Modifier

Table 1215: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1216: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{313} = P\_protein\_deg \cdot [PROTEIN\_M\_Tgif] \quad (738)$$

Table 1217: Properties of each parameter.

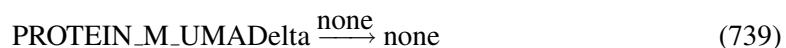
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.314 Reaction PROTEIN\_M\_UMADelta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_UMADelta\_degradation

## Reaction equation



## Reactant

Table 1218: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_UMADelta	PROTEIN_M_UMADelta	

## Modifier

Table 1219: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1220: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{314} = P\_protein\_deg \cdot [PROTEIN\_M\_UMADelta] \quad (740)$$

Table 1221: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.315 Reaction PROTEIN\_M\_UMANrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_UMANrl\_degradation

### Reaction equation



## Reactant

Table 1222: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_UMANrl	PROTEIN_M_UMANrl	

## Modifier

Table 1223: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1224: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{315} = P_{protein\_deg} \cdot [PROTEIN\_M\_UMANrl] \quad (742)$$

Table 1225: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.316 Reaction PROTEIN\_M\_UMR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_UMR\_degradation

### Reaction equation



## Reactant

Table 1226: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_UMR	PROTEIN_M_UMR	

## Modifier

Table 1227: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1228: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{316} = P\_protein\_deg \cdot [PROTEIN\_M\_UMR] \quad (744)$$

Table 1229: Properties of each parameter.

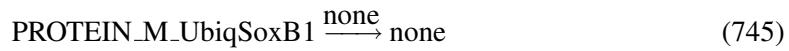
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.317 Reaction PROTEIN\_M\_UbiqSoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_UbiqSoxB1\_degradation

## Reaction equation



## Reactant

Table 1230: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_UbiqSoxB1	PROTEIN_M_UbiqSoxB1	

## Modifier

Table 1231: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1232: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{317} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_UbiqSoxB1}] \quad (746)$$

Table 1233: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.318 Reaction PROTEIN\_M\_VEGFR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_VEGFR\_degradation

**Reaction equation**



**Reactant**

Table 1234: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_VEGFR	PROTEIN_M_VEGFR	

**Modifier**

Table 1235: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1236: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{318} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_M\_VEGFR}] \quad (748)$$

Table 1237: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.319 Reaction PROTEIN\_M\_VEGFSignal\_association\_0

This is an irreversible reaction of three reactants forming one product.

**Name** PROTEIN\_M\_VEGFSignal\_association

### Reaction equation



### Reactants

Table 1238: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_L1	PROTEIN_M_L1	
PROTEIN_M_VEGFR	PROTEIN_M_VEGFR	
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

### Product

Table 1239: Properties of each product.

Id	Name	SBO
PROTEIN_M_VEGFSignal	PROTEIN_M_VEGFSignal	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{319} = P_{\text{association\_k}} \cdot [\text{PROTEIN\_M\_L1}] \cdot [\text{PROTEIN\_M\_VEGFR}] \cdot [\text{PROTEIN\_E\_VEGF}]$$
(750)

Table 1240: Properties of each parameter.

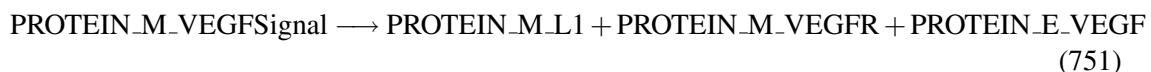
Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.362		<input checked="" type="checkbox"/>

## 7.320 Reaction PROTEIN\_M\_VEGFSignal\_dissociation\_0

This is an irreversible reaction of one reactant forming three products.

**Name** PROTEIN\_M\_VEGFSignal\_dissociation

### Reaction equation



### Reactant

Table 1241: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_VEGFSignal	PROTEIN_M_VEGFSignal	

### Products

Table 1242: Properties of each product.

Id	Name	SBO
PROTEIN_M_L1	PROTEIN_M_L1	
PROTEIN_M_VEGFR	PROTEIN_M_VEGFR	
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{320} = P_{\text{dissociation\_k}} \cdot [\text{PROTEIN\_M\_VEGFSignal}]$$
(752)

Table 1243: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_dissociation_k			0.589		<input checked="" type="checkbox"/>

## 7.321 Reaction PROTEIN\_M\_Wnt8\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_Wnt8\_degradation

**Reaction equation**



**Reactant**

Table 1244: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_Wnt8	PROTEIN_M_Wnt8	

**Modifier**

Table 1245: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1246: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{321} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_Wnt8}] \quad (754)$$

Table 1247: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.322 Reaction PROTEIN\_M\_cB\_a\_degradation\_0

This is an irreversible reaction of one reactant forming no product influenced by one modifier.

**Name** PROTEIN\_M\_cB\_a\_degradation

#### Reaction equation



#### Reactant

Table 1248: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_cB	PROTEIN_M_cB	

#### Modifier

Table 1249: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_GSK3_a	PROTEIN_M_GSK3_a	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{322} = [\text{PROTEIN\_M\_cB}] \cdot [\text{PROTEIN\_M\_GSK3\_a}] \cdot P_{\text{adeg\_k}} \quad (756)$$

Table 1250: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_adeg_k			0.883		<input checked="" type="checkbox"/>

### 7.323 Reaction PROTEIN\_M\_cB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_cB\_degradation

**Reaction equation**



**Reactant**

Table 1251: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_cB	PROTEIN_M_cB	

**Modifier**

Table 1252: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1253: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{323} = P_{protein\_deg} \cdot [\text{PROTEIN\_M\_cB}] \quad (758)$$

Table 1254: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.324 Reaction PROTEIN\_M\_frizzled\_a\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_frizzled\_a\_activation

#### Reaction equation



#### Reactant

Table 1255: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_frizzled_i	PROTEIN_M_frizzled_i	

#### Modifier

Table 1256: Properties of each modifier.

Id	Name	SBO
PROTEIN_M_Wnt8	PROTEIN_M_Wnt8	

#### Product

Table 1257: Properties of each product.

Id	Name	SBO
PROTEIN_M_frizzled_a	PROTEIN_M_frizzled_a	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{324} = [\text{PROTEIN\_M\_frizzled\_i}] \cdot [\text{PROTEIN\_M\_Wnt8}] \cdot P_{\text{activation\_k}} \quad (760)$$

Table 1258: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.851		<input checked="" type="checkbox"/>

### 7.325 Reaction PROTEIN\_M\_frizzled\_a\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_M\_frizzled\_a\_inactivation

#### Reaction equation



#### Reactant

Table 1259: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_frizzled_a	PROTEIN_M_frizzled_a	

#### Product

Table 1260: Properties of each product.

Id	Name	SBO
PROTEIN_M_frizzled_i	PROTEIN_M_frizzled_i	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{325} = [\text{PROTEIN\_M\_frizzled\_a}] \cdot P_{\text{inactivation\_k}} \quad (762)$$

Table 1261: Properties of each parameter.

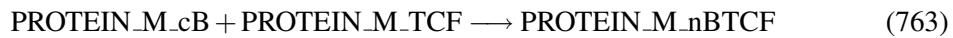
Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.191		<input checked="" type="checkbox"/>

### 7.326 Reaction PROTEIN\_M\_nBTcf\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_M\_nBTcf\_accociation

#### Reaction equation



#### Reactants

Table 1262: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_cB	PROTEIN_M_cB	
PROTEIN_M_TCF	PROTEIN_M_TCF	

#### Product

Table 1263: Properties of each product.

Id	Name	SBO
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{326} = P\_association\_k \cdot [\text{PROTEIN\_M\_cB}] \cdot [\text{PROTEIN\_M\_TCF}] \quad (764)$$

Table 1264: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.329		<input checked="" type="checkbox"/>

### 7.327 Reaction PROTEIN\_M\_nBTcf\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_M\_nBTcf\_dissociation

#### Reaction equation



#### Reactant

Table 1265: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_nBTcf	PROTEIN_M_nBTcf	

#### Products

Table 1266: Properties of each product.

Id	Name	SBO
PROTEIN_M_cB	PROTEIN_M_cB	
PROTEIN_M_TCF	PROTEIN_M_TCF	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{327} = P_{dissociation\_k} \cdot [\text{PROTEIN\_M\_nBTcf}] \quad (766)$$

Table 1267: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.382		<input checked="" type="checkbox"/>

### 7.328 Reaction PROTEIN\_M\_z13\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_M\_z13\_degradation

#### Reaction equation



#### Reactant

Table 1268: Properties of each reactant.

Id	Name	SBO
PROTEIN_M_z13	PROTEIN_M_z13	

#### Modifier

Table 1269: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1270: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{328} = P\_protein\_deg \cdot [PROTEIN\_M\_z13] \quad (768)$$

Table 1271: Properties of each parameter.

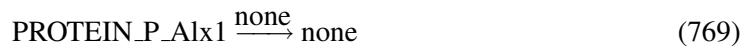
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.329 Reaction PROTEIN\_P\_Alx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Alx1\_degradation

#### Reaction equation



#### Reactant

Table 1272: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Alx1	PROTEIN_P_Alx1	

#### Modifier

Table 1273: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1274: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{329} = P\_protein\_deg \cdot [PROTEIN\_P\_Alx1] \quad (770)$$

Table 1275: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.330 Reaction PROTEIN\_P\_Apobec\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Apobec\_degradation

### Reaction equation



### Reactant

Table 1276: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Apobec	PROTEIN_P_Apobec	

### Modifier

Table 1277: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1278: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{330} = P\_protein\_deg \cdot [PROTEIN\_P\_Apobec] \quad (772)$$

Table 1279: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.331 Reaction PROTEIN\_P\_Blimp1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Blimp1\_degradation

### Reaction equation



### Reactant

Table 1280: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	

### Modifier

Table 1281: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1282: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{331} = P\_protein\_deg \cdot [PROTEIN\_P\_Blimp1] \quad (774)$$

Table 1283: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.332 Reaction PROTEIN\_P\_Bra\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Bra\_degradation

### Reaction equation



### Reactant

Table 1284: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Bra	PROTEIN_P_Bra	

### Modifier

Table 1285: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1286: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{332} = P\_protein\_deg \cdot [PROTEIN\_P\_Bra] \quad (776)$$

Table 1287: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.333 Reaction PROTEIN\_P\_Brn\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Brn\_degradation

## Reaction equation



## Reactant

Table 1288: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Brn	PROTEIN_P_Brn	

## Modifier

Table 1289: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1290: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{333} = P\_protein\_deg \cdot [PROTEIN\_P\_Brn] \quad (778)$$

Table 1291: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.334 Reaction PROTEIN\_P\_CAPK\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_CAPK\_degradation

### Reaction equation



## Reactant

Table 1292: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_CAPK	PROTEIN_P_CAPK	

**Modifier**

Table 1293: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1294: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law****Derived unit** contains undeclared units

$$v_{334} = P\_protein\_deg \cdot [PROTEIN\_P\_CAPK] \quad (780)$$

Table 1295: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

**7.335 Reaction PROTEIN\_P\_CyP\_degradation\_0**

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_CyP\_degradation**Reaction equation**

## Reactant

Table 1296: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_CyP	PROTEIN_P_CyP	

## Modifier

Table 1297: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1298: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{335} = P\_protein\_deg \cdot [PROTEIN\_P\_CyP] \quad (782)$$

Table 1299: Properties of each parameter.

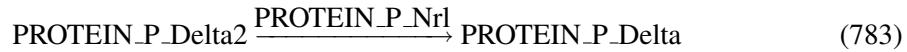
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.336 Reaction PROTEIN\_P\_Delta\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Delta\_activation

## Reaction equation



## Reactant

Table 1300: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Delta2	PROTEIN_P_Delta2	

## Modifier

Table 1301: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Nrl1	PROTEIN_P_Nrl	

## Product

Table 1302: Properties of each product.

Id	Name	SBO
PROTEIN_P_Delta	PROTEIN_P_Delta	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{336} = [\text{PROTEIN\_P\_Delta2}] \cdot [\text{PROTEIN\_P\_Nrl}] \cdot \text{P\_activation\_k} \quad (784)$$

Table 1303: Properties of each parameter.

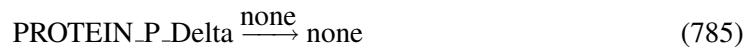
Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.436		<input checked="" type="checkbox"/>

## 7.337 Reaction PROTEIN\_P\_Delta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Delta\_degradation

**Reaction equation**



**Reactant**

Table 1304: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Delta	PROTEIN_P_Delta	

**Modifier**

Table 1305: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1306: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{337} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Delta}] \quad (786)$$

Table 1307: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.338 Reaction PROTEIN\_P\_Delta\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_P\_Delta\_inactivation

#### Reaction equation



#### Reactant

Table 1308: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Delta	PROTEIN_P_Delta	

#### Product

Table 1309: Properties of each product.

Id	Name	SBO
PROTEIN_P_Delta2	PROTEIN_P_Delta2	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{338} = [\text{PROTEIN\_P\_Delta}] \cdot \text{P\_inactivation\_k} \quad (788)$$

Table 1310: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.840		<input checked="" type="checkbox"/>

### 7.339 Reaction PROTEIN\_P\_Dpt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Dpt\_degradation

## Reaction equation



## Reactant

Table 1311: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Dpt	PROTEIN_P_Dpt	

## Modifier

Table 1312: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1313: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{339} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_P\_Dpt}] \quad (790)$$

Table 1314: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.340 Reaction PROTEIN\_P\_Dri\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Dri\_degradation

**Reaction equation**



**Reactant**

Table 1315: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Dri	PROTEIN_P_Dri	

**Modifier**

Table 1316: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1317: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{340} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Dri}] \quad (792)$$

Table 1318: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.341 Reaction PROTEIN\_P\_Endo16\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Endo16\_degradation

### Reaction equation



### Reactant

Table 1319: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Endo16	PROTEIN_P_Endo16	

### Modifier

Table 1320: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1321: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{341} = \text{P\_protein\_deg} \cdot [\text{PROTEIN\_P\_Endo16}] \quad (794)$$

Table 1322: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.342 Reaction PROTEIN\_P\_Erg\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Erg\_degradation

#### Reaction equation



#### Reactant

Table 1323: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Erg	PROTEIN_P_Erg	

#### Modifier

Table 1324: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1325: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{342} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Erg}] \quad (796)$$

Table 1326: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.343 Reaction PROTEIN\_P\_Ets1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Ets1\_degradation

#### Reaction equation



#### Reactant

Table 1327: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	

#### Modifier

Table 1328: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1329: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{343} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Ets1}] \quad (798)$$

Table 1330: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.344 Reaction PROTEIN\_P\_Eve\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Eve\_degradation

#### Reaction equation



#### Reactant

Table 1331: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Eve	PROTEIN_P_Eve	

#### Modifier

Table 1332: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1333: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{344} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Eve}] \quad (800)$$

Table 1334: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.345 Reaction PROTEIN\_P\_Ficolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Ficolin\_degradation

#### Reaction equation



#### Reactant

Table 1335: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Ficolin	PROTEIN_P_Ficolin	

#### Modifier

Table 1336: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1337: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{345} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Ficolin}] \quad (802)$$

Table 1338: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.346 Reaction PROTEIN\_P\_FoxA\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_FoxA\_degradation

**Reaction equation**



**Reactant**

Table 1339: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_FoxA	PROTEIN_P_FoxA	

**Modifier**

Table 1340: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1341: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{346} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_FoxA}] \quad (804)$$

Table 1342: Properties of each parameter.

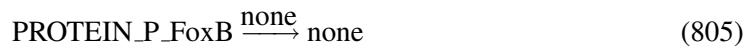
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.347 Reaction PROTEIN\_P\_FoxB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_FoxB\_degradation

#### Reaction equation



#### Reactant

Table 1343: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_FoxB	PROTEIN_P_FoxB	

#### Modifier

Table 1344: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1345: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{347} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_FoxB}] \quad (806)$$

Table 1346: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.348 Reaction PROTEIN\_P\_FoxN23\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_FoxN23\_degradation

#### Reaction equation



#### Reactant

Table 1347: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_FoxN23	PROTEIN_P_FoxN23	

#### Modifier

Table 1348: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1349: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{348} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_FoxN23}] \quad (808)$$

Table 1350: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.349 Reaction PROTEIN\_P\_FoxO\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_FoxO\_degradation

**Reaction equation**



**Reactant**

Table 1351: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_FoxO	PROTEIN_P_FoxO	

**Modifier**

Table 1352: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1353: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{349} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_FoxO}] \quad (810)$$

Table 1354: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.350 Reaction PROTEIN\_P\_FvMo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_FvMo\_degradation

#### Reaction equation



#### Reactant

Table 1355: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_FvMo	PROTEIN_P_FvMo	

#### Modifier

Table 1356: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1357: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{350} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_FvMo}] \quad (812)$$

Table 1358: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.351 Reaction PROTEIN\_P\_GSK3\_i\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_GSK3\_i\_activation

#### Reaction equation



#### Reactant

Table 1359: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_GSK3_a	PROTEIN_P_GSK3_a	

#### Modifier

Table 1360: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_frizzled_a	PROTEIN_P_frizzled_a	

#### Product

Table 1361: Properties of each product.

Id	Name	SBO
PROTEIN_P_GSK3_i	PROTEIN_P_GSK3_i	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{351} = [\text{PROTEIN\_P\_GSK3\_a}] \cdot [\text{PROTEIN\_P\_frizzled\_a}] \cdot \text{P\_activation\_k} \quad (814)$$

Table 1362: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.358		<input checked="" type="checkbox"/>

### 7.352 Reaction PROTEIN\_P\_GSK3\_i\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_P\_GSK3\_i\_inactivation

#### Reaction equation



#### Reactant

Table 1363: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_GSK3_i	PROTEIN_P_GSK3_i	

#### Product

Table 1364: Properties of each product.

Id	Name	SBO
PROTEIN_P_GSK3_a	PROTEIN_P_GSK3_a	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{352} = [\text{PROTEIN\_P\_GSK3\_i}] \cdot \text{P\_inactivation\_k} \quad (816)$$

Table 1365: Properties of each parameter.

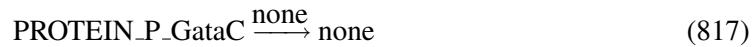
Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.061		<input checked="" type="checkbox"/>

### 7.353 Reaction PROTEIN\_P\_GataC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_GataC\_degradation

**Reaction equation**



**Reactant**

Table 1366: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_GataC	PROTEIN_P_GataC	

**Modifier**

Table 1367: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1368: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{353} = P\_protein\_deg \cdot [PROTEIN\_P\_GataC] \quad (818)$$

Table 1369: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.354 Reaction PROTEIN\_P\_GataE\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_GataE\_degradation

#### Reaction equation



#### Reactant

Table 1370: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	

#### Modifier

Table 1371: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1372: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{354} = P\_protein\_deg \cdot [PROTEIN\_P\_GataE] \quad (820)$$

Table 1373: Properties of each parameter.

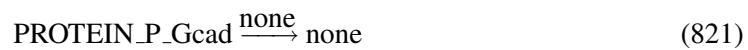
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.355 Reaction PROTEIN\_P\_Gcad\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Gcad\_degradation

### Reaction equation



### Reactant

Table 1374: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Gcad	PROTEIN_P_Gcad	

### Modifier

Table 1375: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1376: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{355} = P\_protein\_deg \cdot [PROTEIN\_P\_Gcad] \quad (822)$$

Table 1377: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.356 Reaction PROTEIN\_P\_Gcm\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Gcm\_degradation

### Reaction equation



### Reactant

Table 1378: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Gcm	PROTEIN_P_Gcm	

### Modifier

Table 1379: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1380: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{356} = P\_protein\_deg \cdot [PROTEIN\_P\_Gcm] \quad (824)$$

Table 1381: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.357 Reaction PROTEIN\_P\_Gelsolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Gelsolin\_degradation

### Reaction equation



## Reactant

Table 1382: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Gelsolin	PROTEIN_P_Gelsolin	

## Modifier

Table 1383: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1384: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{357} = P\_protein\_deg \cdot [PROTEIN\_P\_Gelsolin] \quad (826)$$

Table 1385: Properties of each parameter.

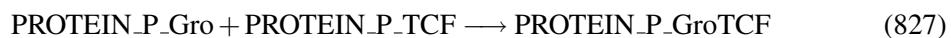
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.358 Reaction PROTEIN\_P\_GroTCF\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_P\_GroTCF\_accociation

### Reaction equation



## Reactants

Table 1386: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Gro	PROTEIN_P_Gro	
PROTEIN_P_TCF	PROTEIN_P_TCF	

## Product

Table 1387: Properties of each product.

Id	Name	SBO
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{358} = P\_association\_k \cdot [PROTEIN\_P\_Gro] \cdot [PROTEIN\_P\_TCF] \quad (828)$$

Table 1388: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.711		<input checked="" type="checkbox"/>

## 7.359 Reaction PROTEIN\_P\_GroTCF\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_P\_GroTCF\_dissociation

### Reaction equation



## Reactant

Table 1389: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_GroTCF	PROTEIN_P_GroTCF	

## Products

Table 1390: Properties of each product.

Id	Name	SBO
PROTEIN_P_Gro	PROTEIN_P_Gro	
PROTEIN_P_TCF	PROTEIN_P_TCF	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{359} = P\_dissociation\_k \cdot [PROTEIN\_P\_GroTCF] \quad (830)$$

Table 1391: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.945		<input checked="" type="checkbox"/>

## 7.360 Reaction PROTEIN\_P\_HesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_HesC\_degradation

### Reaction equation



### Reactant

Table 1392: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_HesC	PROTEIN_P_HesC	

### Modifier

Table 1393: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1394: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{360} = P\_protein\_deg \cdot [PROTEIN\_P\_HesC] \quad (832)$$

Table 1395: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.361 Reaction PROTEIN\_P\_Hex\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Hex\_degradation

## Reaction equation



## Reactant

Table 1396: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Hex	PROTEIN_P_Hex	

## Modifier

Table 1397: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1398: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{361} = P\_protein\_deg \cdot [PROTEIN\_P\_Hex] \quad (834)$$

Table 1399: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.362 Reaction PROTEIN\_P\_Hnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Hnf6\_degradation

### Reaction equation



## Reactant

Table 1400: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	

## Modifier

Table 1401: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1402: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{362} = P\_protein\_deg \cdot [PROTEIN\_P\_Hnf6] \quad (836)$$

Table 1403: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.363 Reaction PROTEIN\_P\_Hox\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Hox\_degradation

### Reaction equation



## Reactant

Table 1404: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Hox	PROTEIN_P_Hox	

## Modifier

Table 1405: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1406: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{363} = P\_protein\_deg \cdot [PROTEIN\_P\_Hox] \quad (838)$$

Table 1407: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.364 Reaction PROTEIN\_P\_Kakapo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Kakapo\_degradation

## Reaction equation



## Reactant

Table 1408: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Kakapo	PROTEIN_P_Kakapo	

## Modifier

Table 1409: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1410: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{364} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_P\_Kakapo}] \quad (840)$$

Table 1411: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.365 Reaction PROTEIN\_P\_L1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_L1\_degradation

**Reaction equation**



**Reactant**

Table 1412: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_L1	PROTEIN_P_L1	

**Modifier**

Table 1413: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1414: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{365} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_L1}] \quad (842)$$

Table 1415: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.366 Reaction PROTEIN\_P\_Lim\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Lim\_degradation

**Reaction equation**



**Reactant**

Table 1416: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Lim	PROTEIN_P_Lim	

**Modifier**

Table 1417: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1418: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{366} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Lim}] \quad (844)$$

Table 1419: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.367 Reaction PROTEIN\_P\_Msp130\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Msp130\_degradation

#### Reaction equation



#### Reactant

Table 1420: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Msp130	PROTEIN_P_Msp130	

#### Modifier

Table 1421: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1422: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{367} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Msp130}]$$
 (846)

Table 1423: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.368 Reaction PROTEIN\_P\_MspL\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_MspL\_degradation

#### Reaction equation



#### Reactant

Table 1424: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_MspL	PROTEIN_P_MspL	

#### Modifier

Table 1425: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1426: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{368} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_MspL}] \quad (848)$$

Table 1427: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.369 Reaction PROTEIN\_P\_Not\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Not\_degradation

#### Reaction equation



#### Reactant

Table 1428: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Not	PROTEIN_P_Not	

#### Modifier

Table 1429: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1430: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{369} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_Not}]$$
 (850)

Table 1431: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.370 Reaction PROTEIN\_P\_Notch\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Notch\_activation

#### Reaction equation



#### Reactant

Table 1432: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Notch2	PROTEIN_P_Notch2	

#### Modifier

Table 1433: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Delta2	PROTEIN_P_Delta2	

#### Product

Table 1434: Properties of each product.

Id	Name	SBO
PROTEIN_P_Notch	PROTEIN_P_Notch	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{370} = [\text{PROTEIN\_P\_Notch2}] \cdot [\text{PROTEIN\_P\_Delta2}] \cdot \text{P\_activation\_k} \quad (852)$$

Table 1435: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_activation_k			0.684		<input checked="" type="checkbox"/>

### 7.371 Reaction PROTEIN\_P\_Notch\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_P\_Notch\_inactivation

#### Reaction equation



#### Reactant

Table 1436: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Notch	PROTEIN_P_Notch	

#### Product

Table 1437: Properties of each product.

Id	Name	SBO
PROTEIN_P_Notch2	PROTEIN_P_Notch2	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{371} = [\text{PROTEIN\_P\_Notch}] \cdot P_{\text{inactivation\_k}} \quad (854)$$

Table 1438: Properties of each parameter.

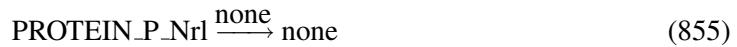
Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.568		<input checked="" type="checkbox"/>

### 7.372 Reaction PROTEIN\_P\_Nrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Nrl\_degradation

#### Reaction equation



#### Reactant

Table 1439: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Nrl	PROTEIN_P_Nrl	

#### Modifier

Table 1440: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1441: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{372} = P\_protein\_deg \cdot [PROTEIN\_P\_Nrl] \quad (856)$$

Table 1442: Properties of each parameter.

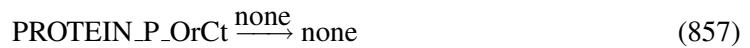
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.373 Reaction PROTEIN\_P\_OrCt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_OrCt\_degradation

#### Reaction equation



#### Reactant

Table 1443: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_OrCt	PROTEIN_P_OrCt	

#### Modifier

Table 1444: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1445: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{373} = P\_protein\_deg \cdot [PROTEIN\_P\_OrCt] \quad (858)$$

Table 1446: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.374 Reaction PROTEIN\_P\_Otx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Otx\_degradation

### Reaction equation



### Reactant

Table 1447: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Otx	PROTEIN_P_Otx	

### Modifier

Table 1448: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1449: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{374} = P\_protein\_deg \cdot [PROTEIN\_P\_Otx] \quad (860)$$

Table 1450: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.375 Reaction PROTEIN\_P\_Pks\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Pks\_degradation

### Reaction equation



### Reactant

Table 1451: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Pks	PROTEIN_P_Pks	

### Modifier

Table 1452: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1453: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{375} = P\_protein\_deg \cdot [PROTEIN\_P\_Pks] \quad (862)$$

Table 1454: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.376 Reaction PROTEIN\_P\_Pmar1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Pmar1\_degradation

### Reaction equation



### Reactant

Table 1455: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Pmar1	PROTEIN_P_Pmar1	

### Modifier

Table 1456: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1457: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{376} = P\_protein\_deg \cdot [PROTEIN\_P\_Pmar1] \quad (864)$$

Table 1458: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.377 Reaction PROTEIN\_P\_Sm27\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Sm27\_degradation

## Reaction equation



## Reactant

Table 1459: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Sm27	PROTEIN_P_Sm27	

## Modifier

Table 1460: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1461: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{377} = P\_protein\_deg \cdot [PROTEIN\_P\_Sm27] \quad (866)$$

Table 1462: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.378 Reaction PROTEIN\_P\_Sm30\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Sm30\_degradation

### Reaction equation



## Reactant

Table 1463: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Sm30	PROTEIN_P_Sm30	

## Modifier

Table 1464: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1465: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{378} = P\_protein\_deg \cdot [PROTEIN\_P\_Sm30] \quad (868)$$

Table 1466: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.379 Reaction PROTEIN\_P\_Sm50\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Sm50\_degradation

## Reaction equation



## Reactant

Table 1467: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Sm50	PROTEIN_P_Sm50	

## Modifier

Table 1468: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1469: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{379} = P\_protein\_deg \cdot [PROTEIN\_P\_Sm50] \quad (870)$$

Table 1470: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.380 Reaction PROTEIN\_P\_Snail\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Snail\_degradation

## Reaction equation



## Reactant

Table 1471: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Snail	PROTEIN.P.Snail	

## Modifier

Table 1472: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1473: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{380} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_P\_Snail}] \quad (872)$$

Table 1474: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.381 Reaction PROTEIN\_P\_SoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_SoxB1\_degradation

**Reaction equation**



**Reactant**

Table 1475: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_SoxB1	PROTEIN_P_SoxB1	

**Modifier**

Table 1476: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1477: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{381} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_SoxB1}] \quad (874)$$

Table 1478: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.382 Reaction PROTEIN\_P\_SoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_SoxC\_degradation

### Reaction equation



### Reactant

Table 1479: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_SoxC	PROTEIN_P_SoxC	

### Modifier

Table 1480: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1481: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{382} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_SoxC}] \quad (876)$$

Table 1482: Properties of each parameter.

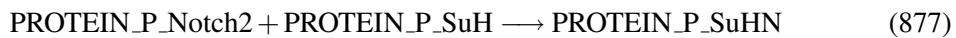
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.383 Reaction PROTEIN\_P\_SuHN\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_P\_SuHN\_accociation

#### Reaction equation



#### Reactants

Table 1483: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Notch2	PROTEIN_P_Notch2	
PROTEIN_P_SuH	PROTEIN_P_SuH	

#### Product

Table 1484: Properties of each product.

Id	Name	SBO
PROTEIN_P_SuHN	PROTEIN_P_SuHN	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{383} = P\_association\_k \cdot [\text{PROTEIN\_P\_Notch2}] \cdot [\text{PROTEIN\_P\_SuH}] \quad (878)$$

Table 1485: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.727		<input checked="" type="checkbox"/>

### 7.384 Reaction PROTEIN\_P\_SuHN\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_P\_SuHN\_dissociation

#### Reaction equation



#### Reactant

Table 1486: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_SuHN	PROTEIN_P_SuHN	

#### Products

Table 1487: Properties of each product.

Id	Name	SBO
PROTEIN_P_Notch2	PROTEIN_P_Notch2	
PROTEIN_P_SuH	PROTEIN_P_SuH	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{384} = P\_dissociation\_k \cdot [\text{PROTEIN\_P\_SuHN}] \quad (880)$$

Table 1488: Properties of each parameter.

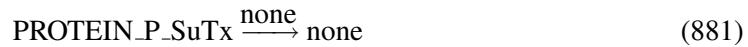
Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.051		<input checked="" type="checkbox"/>

### 7.385 Reaction PROTEIN\_P\_SuTx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_SuTx\_degradation

#### Reaction equation



#### Reactant

Table 1489: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_SuTx	PROTEIN_P_SuTx	

#### Modifier

Table 1490: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1491: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{385} = P\_protein\_deg \cdot [PROTEIN\_P\_SuTx] \quad (882)$$

Table 1492: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.386 Reaction PROTEIN\_P\_TBr\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_TBr\_degradation

#### Reaction equation



#### Reactant

Table 1493: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_TBr	PROTEIN_P_TBr	

#### Modifier

Table 1494: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1495: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{386} = P\_protein\_deg \cdot [PROTEIN\_P\_TBr] \quad (884)$$

Table 1496: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.387 Reaction PROTEIN\_P\_Tel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Tel\_degradation

### Reaction equation



### Reactant

Table 1497: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Tel	PROTEIN_P_Tel	

### Modifier

Table 1498: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1499: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{387} = P\_protein\_deg \cdot [PROTEIN\_P\_Tel] \quad (886)$$

Table 1500: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.388 Reaction PROTEIN\_P\_Tgif\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Tgif\_degradation

### Reaction equation



### Reactant

Table 1501: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_Tgif	PROTEIN_P_Tgif	

### Modifier

Table 1502: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1503: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{388} = P\_protein\_deg \cdot [PROTEIN\_P\_Tgif] \quad (888)$$

Table 1504: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.389 Reaction PROTEIN\_P\_UbiqAlx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqAlx1\_degradation

### Reaction equation



### Reactant

Table 1505: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqAlx1	PROTEIN_P_UbiqAlx1	

### Modifier

Table 1506: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1507: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{389} = P\_protein\_deg \cdot [PROTEIN\_P\_UbiqAlx1] \quad (890)$$

Table 1508: Properties of each parameter.

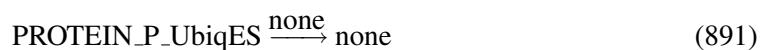
Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.390 Reaction PROTEIN\_P\_UbiqES\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqES\_degradation

## Reaction equation



## Reactant

Table 1509: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqES	PROTEIN_P_UbiqES	

## Modifier

Table 1510: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1511: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{390} = P\_protein\_deg \cdot [PROTEIN\_P\_UbiqES] \quad (892)$$

Table 1512: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein- _deg			0.3		<input checked="" type="checkbox"/>

## 7.391 Reaction PROTEIN\_P\_UbiqEts1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqEts1\_degradation

### Reaction equation



## Reactant

Table 1513: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqEts1	PROTEIN_P_UbiqEts1	

## Modifier

Table 1514: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1515: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{391} = P_{protein\_deg} \cdot [PROTEIN\_P\_UbiqEts1] \quad (894)$$

Table 1516: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.392 Reaction PROTEIN\_P\_UbiqHesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqHesC\_degradation

### Reaction equation



## Reactant

Table 1517: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqHesC	PROTEIN_P_UbiqHesC	

## Modifier

Table 1518: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1519: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{392} = P\_protein\_deg \cdot [PROTEIN\_P\_UbiqHesC] \quad (896)$$

Table 1520: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.393 Reaction PROTEIN\_P\_UbiqHnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqHnf6\_degradation

## Reaction equation



## Reactant

Table 1521: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqHnf6	PROTEIN_P_UbiqHnf6	

## Modifier

Table 1522: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1523: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{393} = P_{\text{protein\_deg}} \cdot [\text{PROTEIN\_P\_UbiqHnf6}] \quad (898)$$

Table 1524: Properties of each parameter.

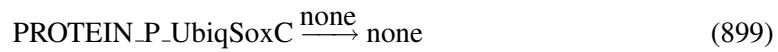
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.394 Reaction PROTEIN\_P\_UbiqSoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqSoxC\_degradation

**Reaction equation**



**Reactant**

Table 1525: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqSoxC	PROTEIN_P_UbiqSoxC	

**Modifier**

Table 1526: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1527: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{394} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_UbiqSoxC}] \quad (900)$$

Table 1528: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.395 Reaction PROTEIN\_P\_UbiqTel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_UbiqTel\_degradation

### Reaction equation



### Reactant

Table 1529: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_UbiqTel	PROTEIN_P_UbiqTel	

### Modifier

Table 1530: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1531: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{395} = P\_protein\_deg \cdot [\text{PROTEIN\_P\_UbiqTel}] \quad (902)$$

Table 1532: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.396 Reaction PROTEIN\_P\_VEGFR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_VEGFR\_degradation

#### Reaction equation



#### Reactant

Table 1533: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_VEGFR	PROTEIN_P_VEGFR	

#### Modifier

Table 1534: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1535: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{396} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_VEGFR}] \quad (904)$$

Table 1536: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

### 7.397 Reaction PROTEIN\_P\_VEGFSignal\_accociation\_0

This is an irreversible reaction of three reactants forming one product.

**Name** PROTEIN\_P\_VEGFSignal\_accociation

#### Reaction equation



#### Reactants

Table 1537: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_L1	PROTEIN_P_L1	
PROTEIN_P_VEGFR	PROTEIN_P_VEGFR	
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

#### Product

Table 1538: Properties of each product.

Id	Name	SBO
PROTEIN_P_VEGFSignal	PROTEIN_P_VEGFSignal	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{397} = P_{association\_k} \cdot [\text{PROTEIN\_P\_L1}] \cdot [\text{PROTEIN\_P\_VEGFR}] \cdot [\text{PROTEIN\_E\_VEGF}]$$

(906)

Table 1539: Properties of each parameter.

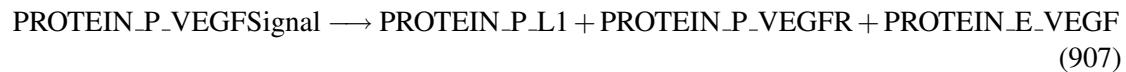
Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.362		<input checked="" type="checkbox"/>

### 7.398 Reaction PROTEIN\_P\_VEGFSignal\_dissociation\_0

This is an irreversible reaction of one reactant forming three products.

**Name** PROTEIN\_P\_VEGFSignal\_dissociation

#### Reaction equation



#### Reactant

Table 1540: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_VEGFSignal	PROTEIN_P_VEGFSignal	

#### Products

Table 1541: Properties of each product.

Id	Name	SBO
PROTEIN_P_L1	PROTEIN_P_L1	
PROTEIN_P_VEGFR	PROTEIN_P_VEGFR	
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{398} = P_{\text{dissociation}} \cdot [PROTEIN\_P\_VEGFSignal] \quad (908)$$

Table 1542: Properties of each parameter.

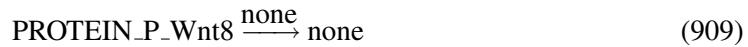
Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.589		<input checked="" type="checkbox"/>

### 7.399 Reaction PROTEIN\_P\_Wnt8\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_Wnt8\_degradation

#### Reaction equation



#### Reactant

Table 1543: Properties of each reactant.		
Id	Name	SBO
PROTEIN_P_Wnt8	PROTEIN_P_Wnt8	

#### Modifier

Table 1544: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1545: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{399} = P\_protein\_deg \cdot [PROTEIN\_P\_Wnt8] \quad (910)$$

Table 1546: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.400 Reaction PROTEIN\_P\_cB\_a\_degradation\_0

This is an irreversible reaction of one reactant forming no product influenced by one modifier.

**Name** PROTEIN\_P\_cB\_a\_degradation

### Reaction equation



### Reactant

Table 1547: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_cB	PROTEIN_P_cB	

### Modifier

Table 1548: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_GSK3_a	PROTEIN_P_GSK3_a	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{400} = [PROTEIN\_P\_cB] \cdot [PROTEIN\_P\_GSK3\_a] \cdot P\_adeg\_k \quad (912)$$

Table 1549: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_adeg_k			0.883		<input checked="" type="checkbox"/>

### 7.401 Reaction PROTEIN\_P\_cB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_cB\_degradation

#### Reaction equation



#### Reactant

Table 1550: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_cB	PROTEIN_P_cB	

#### Modifier

Table 1551: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1552: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{401} = P_{protein\_deg} \cdot [\text{PROTEIN\_P\_cB}] \quad (914)$$

Table 1553: Properties of each parameter.

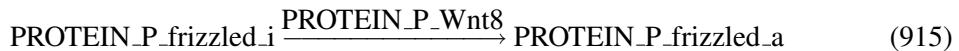
Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.402 Reaction PROTEIN\_P\_frizzled\_a\_activation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_frizzled\_a\_activation

### Reaction equation



### Reactant

Table 1554: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_frizzled_i	PROTEIN_P_frizzled_i	

### Modifier

Table 1555: Properties of each modifier.

Id	Name	SBO
PROTEIN_P_Wnt8	PROTEIN_P_Wnt8	

### Product

Table 1556: Properties of each product.

Id	Name	SBO
PROTEIN_P_frizzled_a	PROTEIN_P_frizzled_a	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{402} = [\text{PROTEIN\_P\_frizzled\_i}] \cdot [\text{PROTEIN\_P\_Wnt8}] \cdot P\_activation\_k \quad (916)$$

Table 1557: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_activation_k			0.851		<input checked="" type="checkbox"/>

### 7.403 Reaction PROTEIN\_P\_frizzled\_a\_inactivation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** PROTEIN\_P\_frizzled\_a\_inactivation

#### Reaction equation



#### Reactant

Table 1558: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_frizzled_a	PROTEIN_P_frizzled_a	

#### Product

Table 1559: Properties of each product.

Id	Name	SBO
PROTEIN_P_frizzled_i	PROTEIN_P_frizzled_i	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{403} = [\text{PROTEIN\_P\_frizzled\_a}] \cdot \text{P\_inactivation\_k} \quad (918)$$

Table 1560: Properties of each parameter.

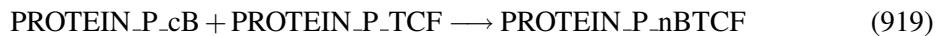
Id	Name	SBO	Value	Unit	Constant
P-_inactivation-_k			0.191		<input checked="" type="checkbox"/>

#### 7.404 Reaction PROTEIN\_P\_nBTcf\_accociation\_0

This is an irreversible reaction of two reactants forming one product.

**Name** PROTEIN\_P\_nBTcf\_accociation

#### Reaction equation



#### Reactants

Table 1561: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_cB	PROTEIN_P_cB	
PROTEIN_P_TCF	PROTEIN_P_TCF	

#### Product

Table 1562: Properties of each product.

Id	Name	SBO
PROTEIN_P_nBTcf	PROTEIN_P_nBTcf	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{404} = P_{association\_k} \cdot [\text{PROTEIN\_P\_cB}] \cdot [\text{PROTEIN\_P\_TCF}]$$
 (920)

Table 1563: Properties of each parameter.

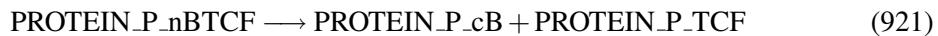
Id	Name	SBO	Value	Unit	Constant
P- _association- _k			0.329		<input checked="" type="checkbox"/>

## 7.405 Reaction PROTEIN\_P\_nBTcf\_dissociation\_0

This is an irreversible reaction of one reactant forming two products.

**Name** PROTEIN\_P\_nBTcf\_dissociation

### Reaction equation



### Reactant

Table 1564: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_nBTcf	PROTEIN_P_nBTcf	

### Products

Table 1565: Properties of each product.

Id	Name	SBO
PROTEIN_P_cB	PROTEIN_P_cB	
PROTEIN_P_TCF	PROTEIN_P_TCF	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{405} = P_{dissociation\_k} \cdot [\text{PROTEIN\_P\_nBTcf}] \quad (922)$$

Table 1566: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P-_dissociation-_k			0.382		<input checked="" type="checkbox"/>

## 7.406 Reaction PROTEIN\_P\_z13\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** PROTEIN\_P\_z13\_degradation

### Reaction equation



### Reactant

Table 1567: Properties of each reactant.

Id	Name	SBO
PROTEIN_P_z13	PROTEIN_P_z13	

### Modifier

Table 1568: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1569: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{406} = P\_protein\_deg \cdot [PROTEIN\_P\_z13] \quad (924)$$

Table 1570: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_protein-deg			0.3		<input checked="" type="checkbox"/>

## 7.407 Reaction P\_Ets1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_Ets1\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 1571: Properties of each reactant.

Id	Name	SBO
PRE_P_Ets1	PRE_P_Ets1	

### Product

Table 1572: Properties of each product.

Id	Name	SBO
mRNA_P_Ets1	mRNA_P_Ets1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{407} = \frac{P\_Ets1\_S1 \cdot P\_Ets1\_HillK \cdot \text{time}^{P\_Ets1\_HillH}}{P\_Ets1\_theta1^{P\_Ets1\_HillH} + \text{time}^{P\_Ets1\_HillH}} + P\_Ets1\_S2 \cdot P\_Ets1\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_Ets1\_HillH}}{P\_Ets1\_theta2^{P\_Ets1\_HillH} + \text{time}^{P\_Ets1\_HillH}} \right) \quad (926)$$

Table 1573: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Ets1-_theta2			11.0		<input checked="" type="checkbox"/>
P_Ets1-_theta1			1.0		<input checked="" type="checkbox"/>
P_Ets1_HillK			10.0		<input checked="" type="checkbox"/>
P_Ets1_HillH			8.0		<input checked="" type="checkbox"/>

## 7.408 Reaction P\_Gcad\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_Gcad\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 1574: Properties of each reactant.

Id	Name	SBO
PRE_P_Gcad	PRE_P_Gcad	

**Product**

Table 1575: Properties of each product.

Id	Name	SBO
mRNA_P_Gcad	mRNA_P_Gcad	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{408} = \frac{P_{\text{Gcad\_S1}} \cdot P_{\text{Gcad\_HillK}} \cdot \text{time}^{P_{\text{Gcad\_HillH}}}}{P_{\text{Gcad\_theta1}}^{P_{\text{Gcad\_HillH}}} + \text{time}^{P_{\text{Gcad\_HillH}}}} + P_{\text{Gcad\_S2}} \cdot P_{\text{Gcad\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{Gcad\_HillH}}}}{P_{\text{Gcad\_theta2}}^{P_{\text{Gcad\_HillH}}} + \text{time}^{P_{\text{Gcad\_HillH}}}} \right) \quad (928)$$

Table 1576: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Gcad_HillH			8.0		<input checked="" type="checkbox"/>
P_Gcad_HillK			10.0		<input checked="" type="checkbox"/>
P_Gcad_-theta1			1.0		<input checked="" type="checkbox"/>
P_Gcad_-theta2			20.0		<input checked="" type="checkbox"/>

## 7.409 Reaction P\_L1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_L1\_Hill\_Kinetic

**Reaction equation**



**Reactant**

Table 1577: Properties of each reactant.

Id	Name	SBO
PRE_P_L1	PRE_P_L1	

**Product**

Table 1578: Properties of each product.

Id	Name	SBO
mRNA_P_L1	mRNA_P_L1	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{409} = \frac{P\_L1\_S1 \cdot P\_L1\_HillK \cdot \text{time}^{P\_L1\_HillH}}{P\_L1\_theta1^{P\_L1\_HillH} + \text{time}^{P\_L1\_HillH}} + P\_L1\_S2 \cdot P\_L1\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_L1\_HillH}}{P\_L1\_theta2^{P\_L1\_HillH} + \text{time}^{P\_L1\_HillH}} \right) \quad (930)$$

Table 1579: Properties of each parameter.

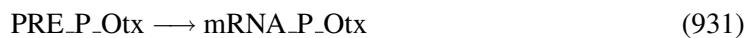
Id	Name	SBO	Value	Unit	Constant
P_L1_theta2			30.0		<input checked="" type="checkbox"/>
P_L1_theta1			21.0		<input checked="" type="checkbox"/>
P_L1_HillK			10.0		<input checked="" type="checkbox"/>
P_L1_HillH			8.0		<input checked="" type="checkbox"/>

## 7.410 Reaction P\_Otx\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_Otx\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 1580: Properties of each reactant.

Id	Name	SBO
PRE_P_Otx	PRE_P_Otx	

### Product

Table 1581: Properties of each product.

Id	Name	SBO
mRNA_P_Otx	mRNA_P_Otx	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{410} = \frac{P_{\text{Otx\_S1}} \cdot P_{\text{Otx\_HillK}} \cdot \text{time}^{P_{\text{Otx\_HillH}}}}{P_{\text{Otx\_theta1}}^{P_{\text{Otx\_HillH}}} + \text{time}^{P_{\text{Otx\_HillH}}}} + P_{\text{Otx\_S2}} \cdot P_{\text{Otx\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{Otx\_HillH}}}}{P_{\text{Otx\_theta2}}^{P_{\text{Otx\_HillH}}} + \text{time}^{P_{\text{Otx\_HillH}}}} \right) \quad (932)$$

Table 1582: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_Otx_HillK			10.0		<input checked="" type="checkbox"/>
P_Otx_HillH			8.0		<input checked="" type="checkbox"/>
P_Otx_theta1			1.0		<input checked="" type="checkbox"/>
P_Otx_theta2			15.0		<input checked="" type="checkbox"/>

### 7.411 Reaction P\_UbiqAlx1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqAlx1\_Hill\_Kinetic

#### Reaction equation



#### Reactant

Table 1583: Properties of each reactant.

Id	Name	SBO
PRE_P_UbiqAlx1	PRE_P_UbiqAlx1	

#### Product

Table 1584: Properties of each product.

Id	Name	SBO
mRNA_P_UbiqAlx1	mRNA_P_UbiqAlx1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{411} = \frac{P_{\text{UbiqAlx1\_S1}} \cdot P_{\text{UbiqAlx1\_HillK}} \cdot \text{time}^{P_{\text{UbiqAlx1\_HillH}}}}{P_{\text{UbiqAlx1\_theta1}}^{P_{\text{UbiqAlx1\_HillH}}} + \text{time}^{P_{\text{UbiqAlx1\_HillH}}}} + P_{\text{UbiqAlx1\_S2}} \\ \cdot P_{\text{UbiqAlx1\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{UbiqAlx1\_HillH}}}}{P_{\text{UbiqAlx1\_theta2}}^{P_{\text{UbiqAlx1\_HillH}}} + \text{time}^{P_{\text{UbiqAlx1\_HillH}}}} \right) \quad (934)$$

Table 1585: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqAlx1-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqAlx1-_theta2			30.0		<input checked="" type="checkbox"/>
P_UbiqAlx1-_HillH			8.0		<input checked="" type="checkbox"/>
P_UbiqAlx1-_HillK			10.0		<input checked="" type="checkbox"/>

### 7.412 Reaction P\_UbiqES\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqES\_Hill\_Kinetic

#### Reaction equation



#### Reactant

Table 1586: Properties of each reactant.

Id	Name	SBO
PRE_P_UbiqES	PRE_P_UbiqES	

#### Product

Table 1587: Properties of each product.

Id	Name	SBO
mRNA_P_UbiqES	mRNA_P_UbiqES	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{412} = \frac{P_{\text{UbiqES\_S1}} \cdot P_{\text{UbiqES\_HillK}} \cdot \text{time}^{P_{\text{UbiqES\_HillH}}}}{P_{\text{UbiqES\_theta1}}^{P_{\text{UbiqES\_HillH}}} + \text{time}^{P_{\text{UbiqES\_HillH}}}} + P_{\text{UbiqES\_S2}} \\ \cdot P_{\text{UbiqES\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{UbiqES\_HillH}}}}{P_{\text{UbiqES\_theta2}}^{P_{\text{UbiqES\_HillH}}} + \text{time}^{P_{\text{UbiqES\_HillH}}}} \right) \quad (936)$$

Table 1588: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqES-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqES-_theta2			20.0		<input checked="" type="checkbox"/>
P_UbiqES-_HillH			8.0		<input checked="" type="checkbox"/>
P_UbiqES-_HillK			10.0		<input checked="" type="checkbox"/>

### 7.413 Reaction P\_UbiqEts1\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqEts1\_Hill\_Kinetic

#### Reaction equation



#### Reactant

Table 1589: Properties of each reactant.		
Id	Name	SBO
PRE_P_UbiqEts1	PRE_P_UbiqEts1	

#### Product

Table 1590: Properties of each product.		
Id	Name	SBO
mRNA_P_UbiqEts1	mRNA_P_UbiqEts1	

Id	Name	SBO
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## Kinetic Law

**Derived unit** contains undeclared units

$$v_{413} = \frac{P_{\text{UbiqEts1\_S1}} \cdot P_{\text{UbiqEts1\_HillK}} \cdot \text{time}^{P_{\text{UbiqEts1\_HillH}}}}{P_{\text{UbiqEts1\_theta1}}^{P_{\text{UbiqEts1\_HillH}}} + \text{time}^{P_{\text{UbiqEts1\_HillH}}}} + P_{\text{UbiqEts1\_S2}} \\ \cdot P_{\text{UbiqEts1\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{UbiqEts1\_HillH}}}}{P_{\text{UbiqEts1\_theta2}}^{P_{\text{UbiqEts1\_HillH}}} + \text{time}^{P_{\text{UbiqEts1\_HillH}}}} \right) \quad (938)$$

Table 1591: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqEts1-_theta2			30.0		<input checked="" type="checkbox"/>
P_UbiqEts1-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqEts1-_HillH			8.0		<input checked="" type="checkbox"/>
P_UbiqEts1-_HillK			10.0		<input checked="" type="checkbox"/>

## 7.414 Reaction P\_UbiqHesC\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqHesC\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 1592: Properties of each reactant.

Id	Name	SBO
PRE_P_UbiqHesC	PRE_P_UbiqHesC	

## Product

Table 1593: Properties of each product.

Id	Name	SBO
mRNA_P_UbiqHesC	mRNA_P_UbiqHesC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{414} = \frac{P\_UbiqHesC\_S1 \cdot P\_UbiqHesC\_HillK \cdot time^{P\_UbiqHesC\_HillH}}{P\_UbiqHesC\_theta1^{P\_UbiqHesC\_HillH} + time^{P\_UbiqHesC\_HillH}} + P\_UbiqHesC\_S2 \\ \cdot P\_UbiqHesC\_HillK \cdot \left( 1 - \frac{time^{P\_UbiqHesC\_HillH}}{P\_UbiqHesC\_theta2^{P\_UbiqHesC\_HillH} + time^{P\_UbiqHesC\_HillH}} \right) \quad (940)$$

Table 1594: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqHesC-_theta2			8.0		<input checked="" type="checkbox"/>
P_UbiqHesC-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqHesC-_HillH			8.0		<input checked="" type="checkbox"/>
P_UbiqHesC-_HillK			10.0		<input checked="" type="checkbox"/>

## 7.415 Reaction P\_UbiqHnf6\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqHnf6\_Hill\_Kinetic

### Reaction equation



## Reactant

Table 1595: Properties of each reactant.

Id	Name	SBO
PRE_P_UbiqHnf6	PRE_P_UbiqHnf6	

## Product

Table 1596: Properties of each product.

Id	Name	SBO
mRNA_P_UbiqHnf6	mRNA_P_UbiqHnf6	

## Kinetic Law

**Derived unit** contains undeclared units

$$\begin{aligned} v_{415} = & \frac{P\_UbiqHnf6\_S1 \cdot P\_UbiqHnf6\_HillK \cdot \text{time}^{P\_UbiqHnf6\_HillH}}{P\_UbiqHnf6\_theta1^{P\_UbiqHnf6\_HillH} + \text{time}^{P\_UbiqHnf6\_HillH}} + P\_UbiqHnf6\_S2 \\ & \cdot P\_UbiqHnf6\_HillK \cdot \left( 1 - \frac{\text{time}^{P\_UbiqHnf6\_HillH}}{P\_UbiqHnf6\_theta2^{P\_UbiqHnf6\_HillH} + \text{time}^{P\_UbiqHnf6\_HillH}} \right) \end{aligned} \quad (942)$$

Table 1597: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqHnf6-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqHnf6-_theta2			23.0		<input checked="" type="checkbox"/>
P_UbiqHnf6-_HillH			8.0		<input checked="" type="checkbox"/>
P_UbiqHnf6-_HillK			10.0		<input checked="" type="checkbox"/>

## 7.416 Reaction P\_UbiqSoxC\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqSoxC\_Hill\_Kinetic

## Reaction equation



## Reactant

Table 1598: Properties of each reactant.

Id	Name	SBO
PRE_P_UbiqSoxC	PRE_P_UbiqSoxC	

## Product

Table 1599: Properties of each product.

Id	Name	SBO
mRNA_P_UbiqSoxC	mRNA_P_UbiqSoxC	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{416} = \frac{P_{\text{UbiqSoxC\_S1}} \cdot P_{\text{UbiqSoxC\_HillK}} \cdot \text{time}^{P_{\text{UbiqSoxC\_HillH}}}}{P_{\text{UbiqSoxC\_theta1}}^{P_{\text{UbiqSoxC\_HillH}}} + \text{time}^{P_{\text{UbiqSoxC\_HillH}}}} + P_{\text{UbiqSoxC\_S2}} \\ \cdot P_{\text{UbiqSoxC\_HillK}} \cdot \left( 1 - \frac{\text{time}^{P_{\text{UbiqSoxC\_HillH}}}}{P_{\text{UbiqSoxC\_theta2}}^{P_{\text{UbiqSoxC\_HillH}}} + \text{time}^{P_{\text{UbiqSoxC\_HillH}}}} \right) \quad (944)$$

Table 1600: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqSoxC-_theta1			1.0		<input checked="" type="checkbox"/>
P_UbiqSoxC-_theta2			17.0		<input checked="" type="checkbox"/>
P_UbiqSoxC-_HillK			10.0		<input checked="" type="checkbox"/>
P_UbiqSoxC-_HillH			8.0		<input checked="" type="checkbox"/>

## 7.417 Reaction P\_UbiqTel\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_UbiqTel\_Hill\_Kinetic

### Reaction equation



### Reactant

Table 1601: Properties of each reactant.

Id	Name	SBO
PRE_P_UbiqTel	PRE_P_UbiqTel	

### Product

Table 1602: Properties of each product.

Id	Name	SBO
mRNA_P_UbiqTel	mRNA_P_UbiqTel	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{417} = \frac{\text{P\_UbiqTel\_S1} \cdot \text{P\_UbiqTel\_HillK} \cdot \text{time}^{\text{P\_UbiqTel\_HillH}}}{\text{P\_UbiqTel\_theta1}^{\text{P\_UbiqTel\_HillH}} + \text{time}^{\text{P\_UbiqTel\_HillH}}} + \text{P\_UbiqTel\_S2} \cdot \text{P\_UbiqTel\_HillK} \cdot \left( 1 - \frac{\text{time}^{\text{P\_UbiqTel\_HillH}}}{\text{P\_UbiqTel\_theta2}^{\text{P\_UbiqTel\_HillH}} + \text{time}^{\text{P\_UbiqTel\_HillH}}} \right) \quad (946)$$

Table 1603: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_UbiqTel_- _HillK			10.0		<input checked="" type="checkbox"/>
P_UbiqTel_- _HillH			8.0		<input checked="" type="checkbox"/>
P_UbiqTel_- _theta2			29.0		<input checked="" type="checkbox"/>

Id	Name	SBO	Value	Unit	Constant
P_UbiqTel-_theta1			1.0		<input checked="" type="checkbox"/>

### 7.418 Reaction P\_cB\_Hill\_Kinetic\_0

This is an irreversible reaction of one reactant forming one product.

**Name** P\_cB\_Hill\_Kinetic

#### Reaction equation



#### Reactant

Table 1604: Properties of each reactant.

Id	Name	SBO
PRE_P_cB	PRE_P_cB	

#### Product

Table 1605: Properties of each product.

Id	Name	SBO
mRNA_P_cB	mRNA_P_cB	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{418} = \frac{P_{cB\_S1} \cdot P_{cB\_HillK} \cdot \text{time}^{P_{cB\_HillH}}}{P_{cB\_theta1}^{P_{cB\_HillH}} + \text{time}^{P_{cB\_HillH}}} + P_{cB\_S2} \cdot P_{cB\_HillK} \cdot \left( 1 - \frac{\text{time}^{P_{cB\_HillH}}}{P_{cB\_theta2}^{P_{cB\_HillH}} + \text{time}^{P_{cB\_HillH}}} \right) \quad (948)$$

Table 1606: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_cB_theta1			1.0		<input checked="" type="checkbox"/>
P_cB_theta2			14.0		<input checked="" type="checkbox"/>
P_cB_HillH			8.0		<input checked="" type="checkbox"/>
P_cB_HillK			10.0		<input checked="" type="checkbox"/>

### 7.419 Reaction mRNA\_E\_Alx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Alx1\_degradation

#### Reaction equation



#### Reactant

Table 1607: Properties of each reactant.

Id	Name	SBO
mRNA_E_Alx1	mRNA_E_Alx1	

#### Modifier

Table 1608: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1609: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{419} = P\_mRNA\_deg \cdot [mRNA\_E\_Alx1] \quad (950)$$

Table 1610: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.420 Reaction mRNA\_E\_Alx1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Alx1\_translation

### Reaction equation



### Reactant

Table 1611: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1612: Properties of each modifier.

Id	Name	SBO
mRNA_E_Alx1	mRNA_E_Alx1	

### Product

Table 1613: Properties of each product.

Id	Name	SBO
PROTEIN_E_Alx1	PROTEIN_E_Alx1	

Id	Name	SBO
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## Kinetic Law

**Derived unit** contains undeclared units

$$v_{420} = P\_k\_translation \cdot [mRNA\_E\_Alx1] \quad (952)$$

Table 1614: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.421 Reaction mRNA\_E\_Apobec\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Apobec\_degradation

### Reaction equation



### Reactant

Table 1615: Properties of each reactant.

Id	Name	SBO
mRNA_E_Apobec	mRNA_E_Apobec	

### Modifier

Table 1616: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1617: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{421} = P\_mRNA\_deg \cdot [mRNA\_E\_Apobec] \quad (954)$$

Table 1618: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.422 Reaction mRNA\_E\_Apobec\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Apobec\_translation

#### Reaction equation



#### Reactant

Table 1619: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1620: Properties of each modifier.

Id	Name	SBO
mRNA_E_Apobec	mRNA_E_Apobec	

## Product

Table 1621: Properties of each product.

Id	Name	SBO
PROTEIN_E_Apobec	PROTEIN_E_Apobec	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{422} = P\_k\_translation \cdot [\text{mRNA\_E\_Apobec}] \quad (956)$$

Table 1622: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.423 Reaction mRNA\_E\_Blimp1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Blimp1\_degradation

### Reaction equation



## Reactant

Table 1623: Properties of each reactant.

Id	Name	SBO
mRNA_E_Blimp1	mRNA_E_Blimp1	

## Modifier

Table 1624: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1625: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{423} = P\_mRNA\_deg \cdot [mRNA\_E\_Blimp1] \quad (958)$$

Table 1626: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.424 Reaction mRNA\_E\_Blimp1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Blimp1\_translation

### Reaction equation



## Reactant

Table 1627: Properties of each reactant.

Id	Name	SBO
none	none	

## Modifier

Table 1628: Properties of each modifier.

Id	Name	SBO
mRNA_E_Blimp1	mRNA_E_Blimp1	

## Product

Table 1629: Properties of each product.

Id	Name	SBO
PROTEIN_E_Blimp1	PROTEIN_E_Blimp1	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{424} = P_{k\_translation} \cdot [mRNA\_E\_Blimp1] \quad (960)$$

Table 1630: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.425 Reaction mRNA\_E\_Bra\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Bra\_degradation

### Reaction equation



## Reactant

Table 1631: Properties of each reactant.

Id	Name	SBO
mRNA_E_Bra	mRNA_E_Bra	

**Modifier**

Table 1632: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1633: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law****Derived unit** contains undeclared units

$$v_{425} = P\_mRNA\_deg \cdot [mRNA\_E\_Bra] \quad (962)$$

Table 1634: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

**7.426 Reaction mRNA\_E\_Bra\_translation\_0**

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Bra\_translation**Reaction equation**

## Reactant

Table 1635: Properties of each reactant.

Id	Name	SBO
none	none	

## Modifier

Table 1636: Properties of each modifier.

Id	Name	SBO
mRNA_E_Bra	mRNA_E_Bra	

## Product

Table 1637: Properties of each product.

Id	Name	SBO
PROTEIN_E_Bra	PROTEIN_E_Bra	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{426} = P_{k\_translation} \cdot [mRNA\_E\_Bra] \quad (964)$$

Table 1638: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.427 Reaction mRNA\_E\_Brn\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Brn\_degradation

## Reaction equation



## Reactant

Table 1639: Properties of each reactant.

Id	Name	SBO
mRNA_E_Brn	mRNA_E_Brn	

## Modifier

Table 1640: Properties of each modifier.

Id	Name	SBO
none	none	

## Product

Table 1641: Properties of each product.

Id	Name	SBO
none	none	

## Kinetic Law

**Derived unit** contains undeclared units

$$v_{427} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Brn}] \quad (966)$$

Table 1642: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.428 Reaction mRNA\_E\_Brn\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Brn\_translation

**Reaction equation**



**Reactant**

Table 1643: Properties of each reactant.

Id	Name	SBO
none	none	

**Modifier**

Table 1644: Properties of each modifier.

Id	Name	SBO
mRNA_E_Brn	mRNA_E_Brn	

**Product**

Table 1645: Properties of each product.

Id	Name	SBO
PROTEIN_E_Brn	PROTEIN_E_Brn	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{428} = P_{k\_translation} \cdot [\text{mRNA\_E\_Brn}] \quad (968)$$

Table 1646: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k_- _translation			2.0		<input checked="" type="checkbox"/>

## 7.429 Reaction mRNA\_E\_CAPK\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_CAPK\_degradation

### Reaction equation



### Reactant

Table 1647: Properties of each reactant.

Id	Name	SBO
mRNA_E_CAPK	mRNA_E_CAPK	

### Modifier

Table 1648: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1649: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{429} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_CAPK}] \quad (970)$$

Table 1650: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.430 Reaction mRNA\_E\_CAPK\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_CAPK\_translation

**Reaction equation**



**Reactant**

Table 1651: Properties of each reactant.

Id	Name	SBO
none	none	

**Modifier**

Table 1652: Properties of each modifier.

Id	Name	SBO
mRNA_E_CAPK	mRNA_E_CAPK	

**Product**

Table 1653: Properties of each product.

Id	Name	SBO
PROTEIN_E_CAPK	PROTEIN_E_CAPK	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{430} = P\_k\_translation \cdot [\text{mRNA\_E\_CAPK}] \quad (972)$$

Table 1654: Properties of each parameter.

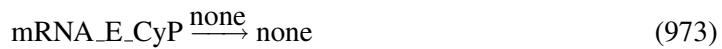
Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.431 Reaction mRNA\_E\_CyP\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_CyP\_degradation

**Reaction equation**



**Reactant**

Table 1655: Properties of each reactant.

Id	Name	SBO
mRNA_E_CyP	mRNA_E_CyP	

**Modifier**

Table 1656: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1657: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{431} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_CyP}] \quad (974)$$

Table 1658: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.432 Reaction mRNA\_E\_CyP\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_CyP\_translation

#### Reaction equation



#### Reactant

Table 1659: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1660: Properties of each modifier.

Id	Name	SBO
mRNA_E_CyP	mRNA_E_CyP	

#### Product

Table 1661: Properties of each product.

Id	Name	SBO
PROTEIN_E_CyP	PROTEIN_E_CyP	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{432} = P_{k\_translation} \cdot [\text{mRNA\_E\_CyP}] \quad (976)$$

Table 1662: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.433 Reaction mRNA\_E\_Delta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Delta\_degradation

#### Reaction equation



#### Reactant

Table 1663: Properties of each reactant.

Id	Name	SBO
mRNA_E_Delta	mRNA_E_Delta	

#### Modifier

Table 1664: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1665: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{433} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Delta}] \quad (978)$$

Table 1666: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.434 Reaction mRNA\_E\_Delta\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Delta\_translation

#### Reaction equation



#### Reactant

Table 1667: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1668: Properties of each modifier.

Id	Name	SBO
mRNA_E_Delta	mRNA_E_Delta	

#### Product

Table 1669: Properties of each product.

Id	Name	SBO
PROTEIN_E_Delta	PROTEIN_E_Delta	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{434} = P_{k\_translation} \cdot [\text{mRNA\_E\_Delta}] \quad (980)$$

Table 1670: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.435 Reaction mRNA\_E\_Dpt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Dpt\_degradation

#### Reaction equation



#### Reactant

Table 1671: Properties of each reactant.

Id	Name	SBO
mRNA_E_Dpt	mRNA_E_Dpt	

#### Modifier

Table 1672: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1673: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{435} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Dpt}] \quad (982)$$

Table 1674: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.436 Reaction mRNA\_E\_Dpt\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Dpt\_translation

#### Reaction equation



#### Reactant

Table 1675: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1676: Properties of each modifier.

Id	Name	SBO
mRNA_E_Dpt	mRNA_E_Dpt	

#### Product

Table 1677: Properties of each product.

Id	Name	SBO
PROTEIN_E_Dpt	PROTEIN_E_Dpt	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{436} = P.k\_translation \cdot [\text{mRNA\_E\_Dpt}] \quad (984)$$

Table 1678: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.437 Reaction mRNA\_E.Dri\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E.Dri\_degradation

#### Reaction equation



#### Reactant

Table 1679: Properties of each reactant.

Id	Name	SBO
mRNA_E.Dri	mRNA_E.Dri	

#### Modifier

Table 1680: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1681: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{437} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_E.Dri}]$$
 (986)

Table 1682: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.438 Reaction mRNA\_E\_Dri\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Dri\_translation

#### Reaction equation



#### Reactant

Table 1683: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1684: Properties of each modifier.

Id	Name	SBO
mRNA_E_Dri	mRNA_E_Dri	

#### Product

Table 1685: Properties of each product.

Id	Name	SBO
PROTEIN_E_Dri	PROTEIN_E_Dri	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{438} = P_{k\_translation} \cdot [\text{mRNA\_E\_Dri}] \quad (988)$$

Table 1686: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.439 Reaction mRNA\_E\_ES\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_ES\_degradation

**Reaction equation**



**Reactant**

Table 1687: Properties of each reactant.

Id	Name	SBO
mRNA_E_ES	mRNA_E_ES	

**Modifier**

Table 1688: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1689: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{439} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_ES}] \quad (990)$$

Table 1690: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.440 Reaction mRNA\_E\_ES\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_ES\_translation

### Reaction equation



### Reactant

Table 1691: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1692: Properties of each modifier.

Id	Name	SBO
mRNA_E_ES	mRNA_E_ES	

### Product

Table 1693: Properties of each product.

Id	Name	SBO
PROTEIN_E_ES	PROTEIN_E_ES	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{440} = P_{k\_translation} \cdot [\text{mRNA\_E\_ES}] \quad (992)$$

Table 1694: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.441 Reaction mRNA\_E\_Endo16\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Endo16\_degradation

#### Reaction equation



#### Reactant

Table 1695: Properties of each reactant.

Id	Name	SBO
mRNA_E_Endo16	mRNA_E_Endo16	

#### Modifier

Table 1696: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1697: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{441} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Endo16}] \quad (994)$$

Table 1698: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.442 Reaction mRNA\_E\_Endo16\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Endo16.translation

### Reaction equation



### Reactant

Table 1699: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1700: Properties of each modifier.

Id	Name	SBO
mRNA_E_Endo16	mRNA_E_Endo16	

### Product

Table 1701: Properties of each product.

Id	Name	SBO
PROTEIN_E_Endo16	PROTEIN_E_Endo16	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{442} = P_{k\_translation} \cdot [\text{mRNA\_E\_Endo16}] \quad (996)$$

Table 1702: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.443 Reaction mRNA\_E\_Erg\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Erg\_degradation

**Reaction equation**



**Reactant**

Table 1703: Properties of each reactant.

Id	Name	SBO
mRNA_E_Erg	mRNA_E_Erg	

**Modifier**

Table 1704: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1705: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{443} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Erg}] \quad (998)$$

Table 1706: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.444 Reaction mRNA\_E\_Erg\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Erg\_translation

#### Reaction equation



#### Reactant

Table 1707: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1708: Properties of each modifier.

Id	Name	SBO
mRNA_E_Erg	mRNA_E_Erg	

#### Product

Table 1709: Properties of each product.

Id	Name	SBO
PROTEIN_E_Erg	PROTEIN_E_Erg	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{444} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_Erg}] \quad (1000)$$

Table 1710: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.445 Reaction mRNA\_E\_Ets1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Ets1\_degradation

**Reaction equation**



**Reactant**

Table 1711: Properties of each reactant.

Id	Name	SBO
mRNA_E_Ets1	mRNA_E_Ets1	

**Modifier**

Table 1712: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1713: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{445} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_E\_Ets1}] \quad (1002)$$

Table 1714: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.446 Reaction mRNA\_E\_Ets1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Ets1\_translation

#### Reaction equation



#### Reactant

Table 1715: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1716: Properties of each modifier.

Id	Name	SBO
mRNA_E_Ets1	mRNA_E_Ets1	

#### Product

Table 1717: Properties of each product.

Id	Name	SBO
PROTEIN_E_Ets1	PROTEIN_E_Ets1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{446} = P_{k\_translation} \cdot [\text{mRNA\_E\_Ets1}] \quad (1004)$$

Table 1718: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.447 Reaction mRNA\_E\_Eve\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Eve\_degradation

#### Reaction equation



#### Reactant

Table 1719: Properties of each reactant.

Id	Name	SBO
mRNA_E_Eve	mRNA_E_Eve	

#### Modifier

Table 1720: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1721: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{447} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Eve}] \quad (1006)$$

Table 1722: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.448 Reaction mRNA\_E\_Eve\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Eve\_translation

#### Reaction equation



#### Reactant

Table 1723: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1724: Properties of each modifier.

Id	Name	SBO
mRNA_E_Eve	mRNA_E_Eve	

#### Product

Table 1725: Properties of each product.

Id	Name	SBO
PROTEIN_E_Eve	PROTEIN_E_Eve	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{448} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_Eve}] \quad (1008)$$

Table 1726: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.449 Reaction mRNA\_E\_Ficolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Ficolin\_degradation

**Reaction equation**



**Reactant**

Table 1727: Properties of each reactant.

Id	Name	SBO
mRNA_E_Ficolin	mRNA_E_Ficolin	

**Modifier**

Table 1728: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1729: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{449} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Ficolin}] \quad (1010)$$

Table 1730: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.450 Reaction mRNA\_E\_Ficolin\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Ficolin\_translation

### Reaction equation



### Reactant

Table 1731: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1732: Properties of each modifier.

Id	Name	SBO
mRNA_E_Ficolin	mRNA_E_Ficolin	

### Product

Table 1733: Properties of each product.

Id	Name	SBO
PROTEIN_E_Ficolin	PROTEIN_E_Ficolin	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{450} = P_{k\_translation} \cdot [\text{mRNA\_E\_Ficolin}] \quad (1012)$$

Table 1734: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.451 Reaction mRNA\_E\_FoxA\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxA\_degradation

**Reaction equation**



**Reactant**

Table 1735: Properties of each reactant.

Id	Name	SBO
mRNA_E_FoxA	mRNA_E_FoxA	

**Modifier**

Table 1736: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1737: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{451} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_FoxA}] \quad (1014)$$

Table 1738: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.452 Reaction mRNA\_E\_FoxA\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxA\_translation

#### Reaction equation



#### Reactant

Table 1739: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1740: Properties of each modifier.

Id	Name	SBO
mRNA_E_FoxA	mRNA_E_FoxA	

#### Product

Table 1741: Properties of each product.

Id	Name	SBO
PROTEIN_E_FoxA	PROTEIN_E_FoxA	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{452} = P_{k\_translation} \cdot [\text{mRNA\_E\_FoxA}] \quad (1016)$$

Table 1742: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.453 Reaction mRNA\_E\_FoxB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxB\_degradation

**Reaction equation**



**Reactant**

Table 1743: Properties of each reactant.

Id	Name	SBO
mRNA_E_FoxB	mRNA_E_FoxB	

**Modifier**

Table 1744: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1745: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{453} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_FoxB}] \quad (1018)$$

Table 1746: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

#### 7.454 Reaction mRNA\_E\_FoxB\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxB\_translation

#### Reaction equation



#### Reactant

Table 1747: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1748: Properties of each modifier.

Id	Name	SBO
mRNA_E_FoxB	mRNA_E_FoxB	

#### Product

Table 1749: Properties of each product.

Id	Name	SBO
PROTEIN_E_FoxB	PROTEIN_E_FoxB	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{454} = P_{k\_translation} \cdot [\text{mRNA\_E\_FoxB}] \quad (1020)$$

Table 1750: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.455 Reaction mRNA\_E\_FoxN23\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxN23\_degradation

#### Reaction equation



#### Reactant

Table 1751: Properties of each reactant.

Id	Name	SBO
mRNA_E_FoxN23	mRNA_E_FoxN23	

#### Modifier

Table 1752: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1753: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{455} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_FoxN23}] \quad (1022)$$

Table 1754: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.456 Reaction mRNA\_E\_FoxN23\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxN23\_translation

#### Reaction equation



#### Reactant

Table 1755: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1756: Properties of each modifier.

Id	Name	SBO
mRNA_E_FoxN23	mRNA_E_FoxN23	

#### Product

Table 1757: Properties of each product.

Id	Name	SBO
PROTEIN_E_FoxN23	PROTEIN_E_FoxN23	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{456} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_FoxN23}] \quad (1024)$$

Table 1758: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.457 Reaction mRNA\_E\_FoxO\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxO\_degradation

**Reaction equation**



**Reactant**

Table 1759: Properties of each reactant.

Id	Name	SBO
mRNA_E_FoxO	mRNA_E_FoxO	

**Modifier**

Table 1760: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1761: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{457} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_FoxO}] \quad (1026)$$

Table 1762: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.458 Reaction mRNA\_E\_FoxO\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FoxO\_translation

#### Reaction equation



#### Reactant

Table 1763: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1764: Properties of each modifier.

Id	Name	SBO
mRNA_E_FoxO	mRNA_E_FoxO	

#### Product

Table 1765: Properties of each product.

Id	Name	SBO
PROTEIN_E_FoxO	PROTEIN_E_FoxO	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{458} = P_{k\_translation} \cdot [\text{mRNA\_E\_FoxO}] \quad (1028)$$

Table 1766: Properties of each parameter.

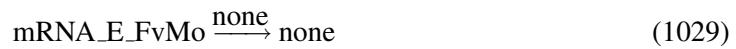
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.459 Reaction mRNA\_E\_FvMo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FvMo\_degradation

**Reaction equation**



**Reactant**

Table 1767: Properties of each reactant.

Id	Name	SBO
mRNA_E_FvMo	mRNA_E_FvMo	

**Modifier**

Table 1768: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1769: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{459} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_FvMo}] \quad (1030)$$

Table 1770: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.460 Reaction mRNA\_E\_FvMo\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_FvMo\_translation

### Reaction equation



### Reactant

Table 1771: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1772: Properties of each modifier.

Id	Name	SBO
mRNA_E_FvMo	mRNA_E_FvMo	

### Product

Table 1773: Properties of each product.

Id	Name	SBO
PROTEIN_E_FvMo	PROTEIN_E_FvMo	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{460} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_FvMo}] \quad (1032)$$

Table 1774: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.461 Reaction mRNA\_E\_GataC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_GataC\_degradation

**Reaction equation**



**Reactant**

Table 1775: Properties of each reactant.

Id	Name	SBO
mRNA_E_GataC	mRNA_E_GataC	

**Modifier**

Table 1776: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1777: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{461} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_GataC}] \quad (1034)$$

Table 1778: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.462 Reaction mRNA\_E\_GataC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_GataC\_translation

### Reaction equation



### Reactant

Table 1779: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1780: Properties of each modifier.

Id	Name	SBO
mRNA_E_GataC	mRNA_E_GataC	

### Product

Table 1781: Properties of each product.

Id	Name	SBO
PROTEIN_E_GataC	PROTEIN_E_GataC	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{462} = P_{k\_translation} \cdot [\text{mRNA\_E\_GataC}] \quad (1036)$$

Table 1782: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.463 Reaction mRNA\_E\_GataE\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_GataE\_degradation

#### Reaction equation



#### Reactant

Table 1783: Properties of each reactant.

Id	Name	SBO
mRNA_E_GataE	mRNA_E_GataE	

#### Modifier

Table 1784: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1785: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{463} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_GataE}] \quad (1038)$$

Table 1786: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.464 Reaction mRNA\_E\_GataE\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_GataE\_translation

#### Reaction equation



#### Reactant

Table 1787: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1788: Properties of each modifier.

Id	Name	SBO
mRNA_E_GataE	mRNA_E_GataE	

#### Product

Table 1789: Properties of each product.

Id	Name	SBO
PROTEIN_E_GataE	PROTEIN_E_GataE	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{464} = P_{k\_translation} \cdot [\text{mRNA\_E\_GataE}] \quad (1040)$$

Table 1790: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.465 Reaction mRNA\_E\_Gcad\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Gcad\_degradation

**Reaction equation**



**Reactant**

Table 1791: Properties of each reactant.

Id	Name	SBO
mRNA_E_Gcad	mRNA_E_Gcad	

**Modifier**

Table 1792: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1793: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{465} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Gcad}] \quad (1042)$$

Table 1794: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.466 Reaction mRNA\_E\_Gcad\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Gcad\_translation

#### Reaction equation



#### Reactant

Table 1795: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1796: Properties of each modifier.

Id	Name	SBO
mRNA_E_Gcad	mRNA_E_Gcad	

#### Product

Table 1797: Properties of each product.

Id	Name	SBO
PROTEIN_E_Gcad	PROTEIN_E_Gcad	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{466} = P_{k\_translation} \cdot [\text{mRNA\_E\_Gcad}] \quad (1044)$$

Table 1798: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.467 Reaction mRNA\_E\_Gcm\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Gcm\_degradation

#### Reaction equation



#### Reactant

Table 1799: Properties of each reactant.

Id	Name	SBO
mRNA_E_Gcm	mRNA_E_Gcm	

#### Modifier

Table 1800: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1801: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{467} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Gcm}] \quad (1046)$$

Table 1802: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.468 Reaction mRNA\_E\_Gcm\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Gcm\_translation

#### Reaction equation



#### Reactant

Table 1803: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1804: Properties of each modifier.

Id	Name	SBO
mRNA_E_Gcm	mRNA_E_Gcm	

#### Product

Table 1805: Properties of each product.

Id	Name	SBO
PROTEIN_E_Gcm	PROTEIN_E_Gcm	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{468} = P_k\_translation \cdot [\text{mRNA\_E\_Gcm}] \quad (1048)$$

Table 1806: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.469 Reaction mRNA\_E\_Gelsolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Gelsolin\_degradation

**Reaction equation**



**Reactant**

Table 1807: Properties of each reactant.

Id	Name	SBO
mRNA_E_Gelsolin	mRNA_E_Gelsolin	

**Modifier**

Table 1808: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1809: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{469} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Gelsolin}] \quad (1050)$$

Table 1810: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.470 Reaction mRNA\_E\_Gelsolin\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Gelsolin\_translation

#### Reaction equation



#### Reactant

Table 1811: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1812: Properties of each modifier.

Id	Name	SBO
mRNA_E_Gelsolin	mRNA_E_Gelsolin	

#### Product

Table 1813: Properties of each product.

Id	Name	SBO
PROTEIN_E_Gelsolin	PROTEIN_E_Gelsolin	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{470} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_Gelsolin}] \quad (1052)$$

Table 1814: Properties of each parameter.

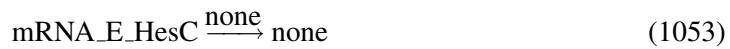
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.471 Reaction mRNA\_E\_HesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_HesC\_degradation

#### Reaction equation



#### Reactant

Table 1815: Properties of each reactant.

Id	Name	SBO
mRNA_E_HesC	mRNA_E_HesC	

#### Modifier

Table 1816: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1817: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{471} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_HesC}] \quad (1054)$$

Table 1818: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.472 Reaction mRNA\_E\_HesC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_HesC\_translation

#### Reaction equation



#### Reactant

Table 1819: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1820: Properties of each modifier.

Id	Name	SBO
mRNA_E_HesC	mRNA_E_HesC	

#### Product

Table 1821: Properties of each product.

Id	Name	SBO
PROTEIN_E_HesC	PROTEIN_E_HesC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{472} = P_{k\_translation} \cdot [\text{mRNA\_E\_HesC}] \quad (1056)$$

Table 1822: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.473 Reaction mRNA\_E\_Hex\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Hex\_degradation

#### Reaction equation



#### Reactant

Table 1823: Properties of each reactant.

Id	Name	SBO
mRNA_E_Hex	mRNA_E_Hex	

#### Modifier

Table 1824: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1825: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{473} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Hex}] \quad (1058)$$

Table 1826: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.474 Reaction mRNA\_E\_Hex\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Hex\_translation

#### Reaction equation



#### Reactant

Table 1827: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1828: Properties of each modifier.

Id	Name	SBO
mRNA_E_Hex	mRNA_E_Hex	

#### Product

Table 1829: Properties of each product.

Id	Name	SBO
PROTEIN_E_Hex	PROTEIN_E_Hex	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{474} = P_{k\_translation} \cdot [\text{mRNA\_E\_Hex}] \quad (1060)$$

Table 1830: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.475 Reaction mRNA\_E\_Hnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Hnf6\_degradation

**Reaction equation**



**Reactant**

Table 1831: Properties of each reactant.

Id	Name	SBO
mRNA_E_Hnf6	mRNA_E_Hnf6	

**Modifier**

Table 1832: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1833: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{475} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Hnf6}] \quad (1062)$$

Table 1834: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.476 Reaction mRNA\_E\_Hnf6\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Hnf6\_translation

#### Reaction equation



#### Reactant

Table 1835: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1836: Properties of each modifier.

Id	Name	SBO
mRNA_E_Hnf6	mRNA_E_Hnf6	

#### Product

Table 1837: Properties of each product.

Id	Name	SBO
PROTEIN_E_Hnf6	PROTEIN_E_Hnf6	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{476} = P_{k\_translation} \cdot [\text{mRNA\_E\_Hnf6}] \quad (1064)$$

Table 1838: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.477 Reaction mRNA\_E\_Hox\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Hox\_degradation

#### Reaction equation



#### Reactant

Table 1839: Properties of each reactant.

Id	Name	SBO
mRNA_E_Hox	mRNA_E_Hox	

#### Modifier

Table 1840: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1841: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{477} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Hox}] \quad (1066)$$

Table 1842: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.478 Reaction mRNA\_E\_Hox\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Hox\_translation

#### Reaction equation



#### Reactant

Table 1843: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1844: Properties of each modifier.

Id	Name	SBO
mRNA_E_Hox	mRNA_E_Hox	

#### Product

Table 1845: Properties of each product.

Id	Name	SBO
PROTEIN_E_Hox	PROTEIN_E_Hox	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{478} = P_{k\_translation} \cdot [\text{mRNA\_E\_Hox}] \quad (1068)$$

Table 1846: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.479 Reaction mRNA\_E\_Kakapo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Kakapo\_degradation

**Reaction equation**



**Reactant**

Table 1847: Properties of each reactant.

Id	Name	SBO
mRNA_E_Kakapo	mRNA_E_Kakapo	

**Modifier**

Table 1848: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1849: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{479} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Kakapo}] \quad (1070)$$

Table 1850: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.480 Reaction mRNA\_E\_Kakapo\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Kakapo\_translation

### Reaction equation



### Reactant

Table 1851: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1852: Properties of each modifier.

Id	Name	SBO
mRNA_E_Kakapo	mRNA_E_Kakapo	

### Product

Table 1853: Properties of each product.

Id	Name	SBO
PROTEIN_E_Kakapo	PROTEIN_E_Kakapo	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{480} = P_{k\_translation} \cdot [\text{mRNA\_E\_Kakapo}] \quad (1072)$$

Table 1854: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.481 Reaction mRNA\_E\_Lim\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Lim\_degradation

**Reaction equation**



**Reactant**

Table 1855: Properties of each reactant.

Id	Name	SBO
mRNA_E_Lim	mRNA_E_Lim	

**Modifier**

Table 1856: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1857: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{481} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Lim}] \quad (1074)$$

Table 1858: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.482 Reaction mRNA\_E\_Lim\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Lim\_translation

#### Reaction equation



#### Reactant

Table 1859: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1860: Properties of each modifier.

Id	Name	SBO
mRNA_E_Lim	mRNA_E_Lim	

#### Product

Table 1861: Properties of each product.

Id	Name	SBO
PROTEIN_E_Lim	PROTEIN_E_Lim	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{482} = P_{k\_translation} \cdot [\text{mRNA\_E\_Lim}] \quad (1076)$$

Table 1862: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.483 Reaction mRNA\_E\_Msp130\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Msp130\_degradation

#### Reaction equation



#### Reactant

Table 1863: Properties of each reactant.

Id	Name	SBO
mRNA_E_Msp130	mRNA_E_Msp130	

#### Modifier

Table 1864: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1865: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{483} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Msp130}] \quad (1078)$$

Table 1866: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.484 Reaction mRNA\_E\_Msp130\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Msp130\_translation

#### Reaction equation



#### Reactant

Table 1867: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1868: Properties of each modifier.

Id	Name	SBO
mRNA_E_Msp130	mRNA_E_Msp130	

#### Product

Table 1869: Properties of each product.

Id	Name	SBO
PROTEIN_E_Msp130	PROTEIN_E_Msp130	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{484} = P.k\_translation \cdot [\text{mRNA\_E\_Msp130}] \quad (1080)$$

Table 1870: Properties of each parameter.

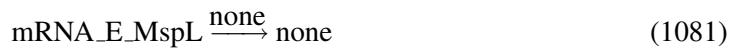
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.485 Reaction mRNA\_E\_MspL\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_MspL\_degradation

**Reaction equation**



**Reactant**

Table 1871: Properties of each reactant.

Id	Name	SBO
mRNA_E_MspL	mRNA_E_MspL	

**Modifier**

Table 1872: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1873: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{485} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_MspL}] \quad (1082)$$

Table 1874: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.486 Reaction mRNA\_E\_MspL\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_MspL\_translation

#### Reaction equation



#### Reactant

Table 1875: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1876: Properties of each modifier.

Id	Name	SBO
mRNA_E_MspL	mRNA_E_MspL	

#### Product

Table 1877: Properties of each product.

Id	Name	SBO
PROTEIN_E_MspL	PROTEIN_E_MspL	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{486} = P.k\_translation \cdot [\text{mRNA\_E\_MspL}] \quad (1084)$$

Table 1878: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.487 Reaction mRNA\_E\_Not\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Not\_degradation

**Reaction equation**



**Reactant**

Table 1879: Properties of each reactant.

Id	Name	SBO
mRNA_E_Not	mRNA_E_Not	

**Modifier**

Table 1880: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1881: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{487} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Not}] \quad (1086)$$

Table 1882: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.488 Reaction mRNA\_E\_Not\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Not\_translation

#### Reaction equation



#### Reactant

Table 1883: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1884: Properties of each modifier.

Id	Name	SBO
mRNA_E_Not	mRNA_E_Not	

#### Product

Table 1885: Properties of each product.

Id	Name	SBO
PROTEIN_E_Not	PROTEIN_E_Not	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{488} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_Not}] \quad (1088)$$

Table 1886: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.489 Reaction mRNA\_E\_Notch\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Notch\_degradation

**Reaction equation**



**Reactant**

Table 1887: Properties of each reactant.

Id	Name	SBO
mRNA_E_Notch	mRNA_E_Notch	

**Modifier**

Table 1888: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1889: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{489} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Notch}] \quad (1090)$$

Table 1890: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.490 Reaction mRNA\_E\_Notch\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Notch\_translation

### Reaction equation



### Reactant

Table 1891: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1892: Properties of each modifier.

Id	Name	SBO
mRNA_E_Notch	mRNA_E_Notch	

### Product

Table 1893: Properties of each product.

Id	Name	SBO
PROTEIN_E_Notch	PROTEIN_E_Notch	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{490} = P_{k\_translation} \cdot [\text{mRNA\_E\_Notch}] \quad (1092)$$

Table 1894: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.491 Reaction mRNA\_E\_Nrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Nrl\_degradation

### Reaction equation



### Reactant

Table 1895: Properties of each reactant.

Id	Name	SBO
mRNA_E_Nrl	mRNA_E_Nrl	

### Modifier

Table 1896: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 1897: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{491} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_E\_Nrl}] \quad (1094)$$

Table 1898: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.492 Reaction mRNA\_E\_Nrl\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Nrl\_translation

#### Reaction equation



#### Reactant

Table 1899: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1900: Properties of each modifier.

Id	Name	SBO
mRNA_E_Nrl	mRNA_E_Nrl	

#### Product

Table 1901: Properties of each product.

Id	Name	SBO
PROTEIN_E_Nrl	PROTEIN_E_Nrl	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{492} = P_{k\_translation} \cdot [\text{mRNA\_E\_Nrl}] \quad (1096)$$

Table 1902: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.493 Reaction mRNA\_E\_OrCt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_OrCt\_degradation

**Reaction equation**



**Reactant**

Table 1903: Properties of each reactant.

Id	Name	SBO
mRNA_E_OrCt	mRNA_E_OrCt	

**Modifier**

Table 1904: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1905: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{493} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_OrCt}] \quad (1098)$$

Table 1906: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.494 Reaction mRNA\_E\_OrCt\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_OrCt\_translation

#### Reaction equation



#### Reactant

Table 1907: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1908: Properties of each modifier.

Id	Name	SBO
mRNA_E_OrCt	mRNA_E_OrCt	

#### Product

Table 1909: Properties of each product.

Id	Name	SBO
PROTEIN_E_OrCt	PROTEIN_E_OrCt	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{494} = P_{k\_translation} \cdot [\text{mRNA\_E\_OrCt}] \quad (1100)$$

Table 1910: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.495 Reaction mRNA\_E\_Otx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Otx\_degradation

**Reaction equation**



**Reactant**

Table 1911: Properties of each reactant.

Id	Name	SBO
mRNA_E_Otx	mRNA_E_Otx	

**Modifier**

Table 1912: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1913: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{495} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Otx}] \quad (1102)$$

Table 1914: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.496 Reaction mRNA\_E\_Otx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Otx\_translation

#### Reaction equation



#### Reactant

Table 1915: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1916: Properties of each modifier.

Id	Name	SBO
mRNA_E_Otx	mRNA_E_Otx	

#### Product

Table 1917: Properties of each product.

Id	Name	SBO
PROTEIN_E_Otx	PROTEIN_E_Otx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{496} = P_{k\_translation} \cdot [\text{mRNA\_E\_Otx}] \quad (1104)$$

Table 1918: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.497 Reaction mRNA\_E\_Pks\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Pks\_degradation

**Reaction equation**



**Reactant**

Table 1919: Properties of each reactant.

Id	Name	SBO
mRNA_E_Pks	mRNA_E_Pks	

**Modifier**

Table 1920: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1921: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{497} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Pks}] \quad (1106)$$

Table 1922: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.498 Reaction mRNA\_E\_Pks\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Pks\_translation

#### Reaction equation



#### Reactant

Table 1923: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1924: Properties of each modifier.

Id	Name	SBO
mRNA_E_Pks	mRNA_E_Pks	

#### Product

Table 1925: Properties of each product.

Id	Name	SBO
PROTEIN_E_Pks	PROTEIN_E_Pks	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{498} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_Pks}] \quad (1108)$$

Table 1926: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.499 Reaction mRNA\_E\_Pmar1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Pmar1\_degradation

**Reaction equation**



**Reactant**

Table 1927: Properties of each reactant.

Id	Name	SBO
mRNA_E_Pmar1	mRNA_E_Pmar1	

**Modifier**

Table 1928: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1929: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$\nu_{499} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Pmar1}] \quad (1110)$$

Table 1930: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.500 Reaction mRNA\_E\_Pmar1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Pmar1\_translation

### Reaction equation



### Reactant

Table 1931: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1932: Properties of each modifier.

Id	Name	SBO
mRNA_E_Pmar1	mRNA_E_Pmar1	

### Product

Table 1933: Properties of each product.

Id	Name	SBO
PROTEIN_E_Pmar1	PROTEIN_E_Pmar1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{500} = P_{k\_translation} \cdot [\text{mRNA\_E\_Pmar1}] \quad (1112)$$

Table 1934: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.501 Reaction mRNA\_E\_Sm27\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Sm27\_degradation

#### Reaction equation



#### Reactant

Table 1935: Properties of each reactant.

Id	Name	SBO
mRNA_E_Sm27	mRNA_E_Sm27	

#### Modifier

Table 1936: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1937: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{501} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Sm27}] \quad (1114)$$

Table 1938: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.502 Reaction mRNA\_E\_Sm27\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Sm27\_translation

### Reaction equation



### Reactant

Table 1939: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 1940: Properties of each modifier.

Id	Name	SBO
mRNA_E_Sm27	mRNA_E_Sm27	

### Product

Table 1941: Properties of each product.

Id	Name	SBO
PROTEIN_E_Sm27	PROTEIN_E_Sm27	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{502} = P.k\_translation \cdot [\text{mRNA\_E\_Sm27}] \quad (1116)$$

Table 1942: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.503 Reaction mRNA\_E\_Sm30\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Sm30\_degradation

#### Reaction equation



#### Reactant

Table 1943: Properties of each reactant.

Id	Name	SBO
mRNA_E_Sm30	mRNA_E_Sm30	

#### Modifier

Table 1944: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1945: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{503} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Sm30}] \quad (1118)$$

Table 1946: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.504 Reaction mRNA\_E\_Sm30\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Sm30\_translation

#### Reaction equation



#### Reactant

Table 1947: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1948: Properties of each modifier.

Id	Name	SBO
mRNA_E_Sm30	mRNA_E_Sm30	

#### Product

Table 1949: Properties of each product.

Id	Name	SBO
PROTEIN_E_Sm30	PROTEIN_E_Sm30	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{504} = P.k\_translation \cdot [\text{mRNA\_E\_Sm30}] \quad (1120)$$

Table 1950: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.505 Reaction mRNA\_E\_Sm50\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Sm50\_degradation

**Reaction equation**



**Reactant**

Table 1951: Properties of each reactant.

Id	Name	SBO
mRNA_E_Sm50	mRNA_E_Sm50	

**Modifier**

Table 1952: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1953: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{505} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Sm50}] \quad (1122)$$

Table 1954: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.506 Reaction mRNA\_E\_Sm50\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Sm50\_translation

#### Reaction equation



#### Reactant

Table 1955: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1956: Properties of each modifier.

Id	Name	SBO
mRNA_E_Sm50	mRNA_E_Sm50	

#### Product

Table 1957: Properties of each product.

Id	Name	SBO
PROTEIN_E_Sm50	PROTEIN_E_Sm50	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{506} = P_{k\_translation} \cdot [\text{mRNA\_E\_Sm50}] \quad (1124)$$

Table 1958: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.507 Reaction mRNA\_E\_Snail\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Snail\_degradation

**Reaction equation**



**Reactant**

Table 1959: Properties of each reactant.

Id	Name	SBO
mRNA_E_Snail	mRNA_E_Snail	

**Modifier**

Table 1960: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1961: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{507} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Snail}] \quad (1126)$$

Table 1962: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.508 Reaction mRNA\_E\_Snail\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Snail\_translation

#### Reaction equation



#### Reactant

Table 1963: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1964: Properties of each modifier.

Id	Name	SBO
mRNA_E_Snail	mRNA_E_Snail	

#### Product

Table 1965: Properties of each product.

Id	Name	SBO
PROTEIN_E_Snail	PROTEIN_E_Snail	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{508} = P_{k\_translation} \cdot [\text{mRNA\_E\_Snail}] \quad (1128)$$

Table 1966: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.509 Reaction mRNA\_E\_SoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SoxB1\_degradation

#### Reaction equation



#### Reactant

Table 1967: Properties of each reactant.

Id	Name	SBO
mRNA_E_SoxB1	mRNA_E_SoxB1	

#### Modifier

Table 1968: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 1969: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{509} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_SoxB1}] \quad (1130)$$

Table 1970: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.510 Reaction mRNA\_E\_SoxB1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SoxB1\_translation

#### Reaction equation



#### Reactant

Table 1971: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1972: Properties of each modifier.

Id	Name	SBO
mRNA_E_SoxB1	mRNA_E_SoxB1	

#### Product

Table 1973: Properties of each product.

Id	Name	SBO
PROTEIN_E_SoxB1	PROTEIN_E_SoxB1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{510} = P_{k\_translation} \cdot [\text{mRNA\_E\_SoxB1}] \quad (1132)$$

Table 1974: Properties of each parameter.

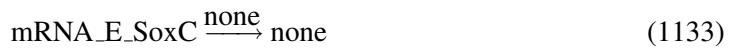
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.511 Reaction mRNA\_E\_SoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SoxC\_degradation

**Reaction equation**



**Reactant**

Table 1975: Properties of each reactant.

Id	Name	SBO
mRNA_E_SoxC	mRNA_E_SoxC	

**Modifier**

Table 1976: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1977: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{511} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_SoxC}] \quad (1134)$$

Table 1978: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.512 Reaction mRNA\_E\_SoxC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SoxC\_translation

#### Reaction equation



#### Reactant

Table 1979: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1980: Properties of each modifier.

Id	Name	SBO
mRNA_E_SoxC	mRNA_E_SoxC	

#### Product

Table 1981: Properties of each product.

Id	Name	SBO
PROTEIN_E_SoxC	PROTEIN_E_SoxC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{512} = P_{k\_translation} \cdot [\text{mRNA\_E\_SoxC}] \quad (1136)$$

Table 1982: Properties of each parameter.

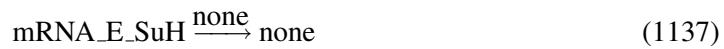
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.513 Reaction mRNA\_E\_SuH\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SuH\_degradation

**Reaction equation**



**Reactant**

Table 1983: Properties of each reactant.

Id	Name	SBO
mRNA_E_SuH	mRNA_E_SuH	

**Modifier**

Table 1984: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1985: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{513} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_E\_SuH}] \quad (1138)$$

Table 1986: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.514 Reaction mRNA\_E\_SuH\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SuH\_translation

#### Reaction equation



#### Reactant

Table 1987: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1988: Properties of each modifier.

Id	Name	SBO
mRNA_E_SuH	mRNA_E_SuH	

#### Product

Table 1989: Properties of each product.

Id	Name	SBO
PROTEIN_E_SuH	PROTEIN_E_SuH	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{514} = P_{k\_translation} \cdot [\text{mRNA\_E\_SuH}] \quad (1140)$$

Table 1990: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.515 Reaction mRNA\_E\_SuTx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SuTx\_degradation

**Reaction equation**



**Reactant**

Table 1991: Properties of each reactant.

Id	Name	SBO
mRNA_E_SuTx	mRNA_E_SuTx	

**Modifier**

Table 1992: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 1993: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{515} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_SuTx}] \quad (1142)$$

Table 1994: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.516 Reaction mRNA\_E\_SuTx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_SuTx\_translation

#### Reaction equation



#### Reactant

Table 1995: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 1996: Properties of each modifier.

Id	Name	SBO
mRNA_E_SuTx	mRNA_E_SuTx	

#### Product

Table 1997: Properties of each product.

Id	Name	SBO
PROTEIN_E_SuTx	PROTEIN_E_SuTx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{516} = P_{k\_translation} \cdot [\text{mRNA\_E\_SuTx}] \quad (1144)$$

Table 1998: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.517 Reaction mRNA\_E\_TBr\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_TBr\_degradation

**Reaction equation**



**Reactant**

Table 1999: Properties of each reactant.

Id	Name	SBO
mRNA_E_TBr	mRNA_E_TBr	

**Modifier**

Table 2000: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2001: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{517} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_TBr}] \quad (1146)$$

Table 2002: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.518 Reaction mRNA\_E\_TBr\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_TBr\_translation

#### Reaction equation



#### Reactant

Table 2003: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2004: Properties of each modifier.

Id	Name	SBO
mRNA_E_TBr	mRNA_E_TBr	

#### Product

Table 2005: Properties of each product.

Id	Name	SBO
PROTEIN_E_TBr	PROTEIN_E_TBr	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{518} = P_{k\_translation} \cdot [\text{mRNA\_E\_TBr}] \quad (1148)$$

Table 2006: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.519 Reaction mRNA\_E\_Tel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Tel\_degradation

**Reaction equation**



**Reactant**

Table 2007: Properties of each reactant.

Id	Name	SBO
mRNA_E_Tel	mRNA_E_Tel	

**Modifier**

Table 2008: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2009: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{519} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Tel}] \quad (1150)$$

Table 2010: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.520 Reaction mRNA\_E\_Tel\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Tel\_translation

### Reaction equation



### Reactant

Table 2011: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2012: Properties of each modifier.

Id	Name	SBO
mRNA_E_Tel	mRNA_E_Tel	

### Product

Table 2013: Properties of each product.

Id	Name	SBO
PROTEIN_E_Tel	PROTEIN_E_Tel	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{520} = P_{k\_translation} \cdot [\text{mRNA\_E\_Tel}] \quad (1152)$$

Table 2014: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.521 Reaction mRNA\_E\_Tgif\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E.Tgif.degradation

**Reaction equation**



**Reactant**

Table 2015: Properties of each reactant.

Id	Name	SBO
mRNA_E_Tgif	mRNA_E_Tgif	

**Modifier**

Table 2016: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2017: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{521} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Tgif}] \quad (1154)$$

Table 2018: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.522 Reaction mRNA\_E\_Tgif\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Tgif\_translation

#### Reaction equation



#### Reactant

Table 2019: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2020: Properties of each modifier.

Id	Name	SBO
mRNA_E_Tgif	mRNA_E_Tgif	

#### Product

Table 2021: Properties of each product.

Id	Name	SBO
PROTEIN_E_Tgif	PROTEIN_E_Tgif	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{522} = P_{k\_translation} \cdot [\text{mRNA\_E\_Tgif}] \quad (1156)$$

Table 2022: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.523 Reaction mRNA\_E\_UMR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_UMR\_degradation

#### Reaction equation



#### Reactant

Table 2023: Properties of each reactant.

Id	Name	SBO
mRNA_E_UMR	mRNA_E_UMR	

#### Modifier

Table 2024: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2025: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{523} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_UMR}] \quad (1158)$$

Table 2026: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.524 Reaction mRNA\_E\_UMR\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_UMR\_translation

#### Reaction equation



#### Reactant

Table 2027: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2028: Properties of each modifier.

Id	Name	SBO
mRNA_E_UMR	mRNA_E_UMR	

#### Product

Table 2029: Properties of each product.

Id	Name	SBO
PROTEIN_E_UMR	PROTEIN_E_UMR	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{524} = P.k\_translation \cdot [\text{mRNA\_E\_UMR}] \quad (1160)$$

Table 2030: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.525 Reaction mRNA\_E\_UVA0tx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_UVA0tx\_degradation

#### Reaction equation



#### Reactant

Table 2031: Properties of each reactant.

Id	Name	SBO
mRNA_E_UVA0tx	mRNA_E_UVA0tx	

#### Modifier

Table 2032: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2033: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{525} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_UVA0tx}] \quad (1162)$$

Table 2034: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.526 Reaction mRNA\_E\_UVAOtx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_UVAOtx\_translation

#### Reaction equation



#### Reactant

Table 2035: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2036: Properties of each modifier.

Id	Name	SBO
mRNA_E_UVAOtx	mRNA_E_UVAOtx	

#### Product

Table 2037: Properties of each product.

Id	Name	SBO
PROTEIN_E_UVAOtx	PROTEIN_E_UVAOtx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{526} = P_{k\_translation} \cdot [\text{mRNA\_E\_UVAOtx}] \quad (1164)$$

Table 2038: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.527 Reaction mRNA\_E\_UbiqSoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_UbiqSoxB1\_degradation

#### Reaction equation



#### Reactant

Table 2039: Properties of each reactant.

Id	Name	SBO
mRNA_E_UbiqSoxB1	mRNA_E_UbiqSoxB1	

#### Modifier

Table 2040: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2041: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{527} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_UbiqSoxB1}] \quad (1166)$$

Table 2042: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.528 Reaction mRNA\_E\_UbiqSoxB1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_UbiqSoxB1\_translation

#### Reaction equation



#### Reactant

Table 2043: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2044: Properties of each modifier.

Id	Name	SBO
mRNA_E_UbiqSoxB1	mRNA_E_UbiqSoxB1	

#### Product

Table 2045: Properties of each product.

Id	Name	SBO
PROTEIN_E_UbiqSoxB1	PROTEIN_E_UbiqSoxB1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{528} = P_{k\_translation} \cdot [\text{mRNA\_E\_UbiqSoxB1}] \quad (1168)$$

Table 2046: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.529 Reaction mRNA\_E\_VEGFR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_VEGFR\_degradation

**Reaction equation**



**Reactant**

Table 2047: Properties of each reactant.

Id	Name	SBO
mRNA_E_VEGFR	mRNA_E_VEGFR	

**Modifier**

Table 2048: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2049: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{529} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_VEGFR}] \quad (1170)$$

Table 2050: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.530 Reaction mRNA\_E\_VEGFR\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_VEGFR\_translation

**Reaction equation**



**Reactant**

Table 2051: Properties of each reactant.

Id	Name	SBO
none	none	

**Modifier**

Table 2052: Properties of each modifier.

Id	Name	SBO
mRNA_E_VEGFR	mRNA_E_VEGFR	

**Product**

Table 2053: Properties of each product.

Id	Name	SBO
PROTEIN_E_VEGFR	PROTEIN_E_VEGFR	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{530} = P.k.translation \cdot [\text{mRNA\_E\_VEGFR}] \quad (1172)$$

Table 2054: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.531 Reaction mRNA\_E\_VEGF\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_VEGF\_degradation

**Reaction equation**



**Reactant**

Table 2055: Properties of each reactant.

Id	Name	SBO
mRNA_E_VEGF	mRNA_E_VEGF	

**Modifier**

Table 2056: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2057: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{531} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_VEGF}] \quad (1174)$$

Table 2058: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.532 Reaction mRNA\_E\_VEGF\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_VEGF\_translation

#### Reaction equation



#### Reactant

Table 2059: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2060: Properties of each modifier.

Id	Name	SBO
mRNA_E_VEGF	mRNA_E_VEGF	

#### Product

Table 2061: Properties of each product.

Id	Name	SBO
PROTEIN_E_VEGF	PROTEIN_E_VEGF	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{532} = P_{k\_translation} \cdot [\text{mRNA\_E\_VEGF}] \quad (1176)$$

Table 2062: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.533 Reaction mRNA\_E\_Wnt8\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Wnt8\_degradation

#### Reaction equation



#### Reactant

Table 2063: Properties of each reactant.

Id	Name	SBO
mRNA_E_Wnt8	mRNA_E_Wnt8	

#### Modifier

Table 2064: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2065: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{533} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_Wnt8}] \quad (1178)$$

Table 2066: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.534 Reaction mRNA\_E\_Wnt8\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_Wnt8\_translation

#### Reaction equation



#### Reactant

Table 2067: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2068: Properties of each modifier.

Id	Name	SBO
mRNA_E_Wnt8	mRNA_E_Wnt8	

#### Product

Table 2069: Properties of each product.

Id	Name	SBO
PROTEIN_E_Wnt8	PROTEIN_E_Wnt8	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{534} = P_{k\_translation} \cdot [\text{mRNA\_E\_Wnt8}] \quad (1180)$$

Table 2070: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.535 Reaction mRNA\_E\_cB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_cB\_degradation

**Reaction equation**



**Reactant**

Table 2071: Properties of each reactant.

Id	Name	SBO
mRNA_E_cB	mRNA_E_cB	

**Modifier**

Table 2072: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2073: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{535} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_cB}] \quad (1182)$$

Table 2074: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.536 Reaction mRNA\_E\_cB\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_cB\_translation

#### Reaction equation



#### Reactant

Table 2075: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2076: Properties of each modifier.

Id	Name	SBO
mRNA_E_cB	mRNA_E_cB	

#### Product

Table 2077: Properties of each product.

Id	Name	SBO
PROTEIN_E_cB	PROTEIN_E_cB	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{536} = P_{k\_translation} \cdot [\text{mRNA\_E\_cB}] \quad (1184)$$

Table 2078: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.537 Reaction mRNA\_E\_z13\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_z13\_degradation

**Reaction equation**



**Reactant**

Table 2079: Properties of each reactant.

Id	Name	SBO
mRNA_E_z13	mRNA_E_z13	

**Modifier**

Table 2080: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2081: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{537} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_E\_z13}] \quad (1186)$$

Table 2082: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.538 Reaction mRNA\_E\_z13\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_E\_z13\_translation

#### Reaction equation



#### Reactant

Table 2083: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2084: Properties of each modifier.

Id	Name	SBO
mRNA_E_z13	mRNA_E_z13	

#### Product

Table 2085: Properties of each product.

Id	Name	SBO
PROTEIN_E_z13	PROTEIN_E_z13	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{538} = P_{\text{k\_translation}} \cdot [\text{mRNA\_E\_z13}] \quad (1188)$$

Table 2086: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.539 Reaction mRNA\_M\_Alx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Alx1\_degradation

#### Reaction equation



#### Reactant

Table 2087: Properties of each reactant.

Id	Name	SBO
mRNA_M_Alx1	mRNA_M_Alx1	

#### Modifier

Table 2088: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2089: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{539} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Alx1}] \quad (1190)$$

Table 2090: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.540 Reaction mRNA\_M\_Alx1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Alx1\_translation

#### Reaction equation



#### Reactant

Table 2091: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2092: Properties of each modifier.

Id	Name	SBO
mRNA_M_Alx1	mRNA_M_Alx1	

#### Product

Table 2093: Properties of each product.

Id	Name	SBO
PROTEIN_M_Alx1	PROTEIN_M_Alx1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{540} = P_{k\_translation} \cdot [\text{mRNA\_M\_Alx1}] \quad (1192)$$

Table 2094: Properties of each parameter.

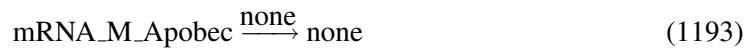
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.541 Reaction mRNA\_M\_Apobec\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Apobec\_degradation

#### Reaction equation



#### Reactant

Table 2095: Properties of each reactant.

Id	Name	SBO
mRNA_M_Apobec	mRNA_M_Apobec	

#### Modifier

Table 2096: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2097: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{541} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Apobec}] \quad (1194)$$

Table 2098: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.542 Reaction mRNA\_M\_Apobec\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Apobec\_translation

#### Reaction equation



#### Reactant

Table 2099: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2100: Properties of each modifier.

Id	Name	SBO
mRNA_M_Apobec	mRNA_M_Apobec	

#### Product

Table 2101: Properties of each product.

Id	Name	SBO
PROTEIN_M_Apobec	PROTEIN_M_Apobec	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{542} = P_{\text{k\_translation}} \cdot [\text{mRNA\_M\_Apobec}] \quad (1196)$$

Table 2102: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.543 Reaction mRNA\_M\_Blimp1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Blimp1\_degradation

#### Reaction equation



#### Reactant

Table 2103: Properties of each reactant.

Id	Name	SBO
mRNA_M_Blimp1	mRNA_M_Blimp1	

#### Modifier

Table 2104: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2105: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{543} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Blimp1}] \quad (1198)$$

Table 2106: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.544 Reaction mRNA\_M\_Blimp1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Blimp1\_translation

#### Reaction equation



#### Reactant

Table 2107: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2108: Properties of each modifier.

Id	Name	SBO
mRNA_M_Blimp1	mRNA_M_Blimp1	

#### Product

Table 2109: Properties of each product.

Id	Name	SBO
PROTEIN_M_Blimp1	PROTEIN_M_Blimp1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{544} = P.k.translation \cdot [\text{mRNA\_M\_Blimp1}] \quad (1200)$$

Table 2110: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.545 Reaction mRNA\_M\_Bra\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Bra\_degradation

**Reaction equation**



**Reactant**

Table 2111: Properties of each reactant.

Id	Name	SBO
mRNA_M_Bra	mRNA_M_Bra	

**Modifier**

Table 2112: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2113: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{545} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Bra}] \quad (1202)$$

Table 2114: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.546 Reaction mRNA\_M\_Bra\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Bra\_translation

#### Reaction equation



#### Reactant

Table 2115: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2116: Properties of each modifier.

Id	Name	SBO
mRNA_M_Bra	mRNA_M_Bra	

#### Product

Table 2117: Properties of each product.

Id	Name	SBO
PROTEIN_M_Bra	PROTEIN_M_Bra	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{546} = P_{k\_translation} \cdot [\text{mRNA\_M\_Bra}] \quad (1204)$$

Table 2118: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.547 Reaction mRNA\_M\_Brn\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Brn\_degradation

**Reaction equation**



**Reactant**

Table 2119: Properties of each reactant.

Id	Name	SBO
mRNA_M_Brn	mRNA_M_Brn	

**Modifier**

Table 2120: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2121: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{547} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_M\_Brn}] \quad (1206)$$

Table 2122: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.548 Reaction mRNA\_M\_Brn\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Brn\_translation

#### Reaction equation



#### Reactant

Table 2123: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2124: Properties of each modifier.

Id	Name	SBO
mRNA_M_Brn	mRNA_M_Brn	

#### Product

Table 2125: Properties of each product.

Id	Name	SBO
PROTEIN_M_Brn	PROTEIN_M_Brn	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{548} = P_{k\_translation} \cdot [\text{mRNA\_M\_Brn}] \quad (1208)$$

Table 2126: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.549 Reaction mRNA\_M\_CAPK\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_CAPK\_degradation

**Reaction equation**



**Reactant**

Table 2127: Properties of each reactant.

Id	Name	SBO
mRNA_M_CAPK	mRNA_M_CAPK	

**Modifier**

Table 2128: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2129: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{549} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_CAPK}] \quad (1210)$$

Table 2130: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.550 Reaction mRNA\_M\_CAPK\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_CAPK\_translation

### Reaction equation



### Reactant

Table 2131: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2132: Properties of each modifier.

Id	Name	SBO
mRNA_M_CAPK	mRNA_M_CAPK	

### Product

Table 2133: Properties of each product.

Id	Name	SBO
PROTEIN_M_CAPK	PROTEIN_M_CAPK	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{550} = P_{k\_translation} \cdot [\text{mRNA\_M\_CAPK}] \quad (1212)$$

Table 2134: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.551 Reaction mRNA\_M\_CyP\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_CyP\_degradation

#### Reaction equation



#### Reactant

Table 2135: Properties of each reactant.

Id	Name	SBO
mRNA_M_CyP	mRNA_M_CyP	

#### Modifier

Table 2136: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2137: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{551} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_CyP}] \quad (1214)$$

Table 2138: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.552 Reaction mRNA\_M\_CyP\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_CyP\_translation

### Reaction equation



### Reactant

Table 2139: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2140: Properties of each modifier.

Id	Name	SBO
mRNA_M_CyP	mRNA_M_CyP	

### Product

Table 2141: Properties of each product.

Id	Name	SBO
PROTEIN_M_CyP	PROTEIN_M_CyP	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{552} = P_{k\_translation} \cdot [\text{mRNA\_M\_CyP}] \quad (1216)$$

Table 2142: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.553 Reaction mRNA\_M\_Delta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Delta\_degradation

**Reaction equation**



**Reactant**

Table 2143: Properties of each reactant.

Id	Name	SBO
mRNA_M_Delta	mRNA_M_Delta	

**Modifier**

Table 2144: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2145: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{553} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Delta}] \quad (1218)$$

Table 2146: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.554 Reaction mRNA\_M\_Delta\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Delta\_translation

#### Reaction equation



#### Reactant

Table 2147: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2148: Properties of each modifier.

Id	Name	SBO
mRNA_M_Delta	mRNA_M_Delta	

#### Product

Table 2149: Properties of each product.

Id	Name	SBO
PROTEIN_M_Delta	PROTEIN_M_Delta	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{554} = P_{k\_translation} \cdot [\text{mRNA\_M\_Delta}] \quad (1220)$$

Table 2150: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.555 Reaction mRNA\_M\_Dpt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Dpt\_degradation

#### Reaction equation



#### Reactant

Table 2151: Properties of each reactant.

Id	Name	SBO
mRNA_M_Dpt	mRNA_M_Dpt	

#### Modifier

Table 2152: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2153: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{555} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_M\_Dpt}] \quad (1222)$$

Table 2154: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.556 Reaction mRNA\_M\_Dpt\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Dpt\_translation

#### Reaction equation



#### Reactant

Table 2155: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2156: Properties of each modifier.

Id	Name	SBO
mRNA_M_Dpt	mRNA_M_Dpt	

#### Product

Table 2157: Properties of each product.

Id	Name	SBO
PROTEIN_M_Dpt	PROTEIN_M_Dpt	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{556} = P_{k\_translation} \cdot [\text{mRNA\_M\_Dpt}] \quad (1224)$$

Table 2158: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.557 Reaction mRNA\_M\_Dri\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Dri\_degradation

**Reaction equation**



**Reactant**

Table 2159: Properties of each reactant.

Id	Name	SBO
mRNA_M_Dri	mRNA_M_Dri	

**Modifier**

Table 2160: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2161: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{557} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Dri}] \quad (1226)$$

Table 2162: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.558 Reaction mRNA\_M\_Dri\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Dri\_translation

#### Reaction equation



#### Reactant

Table 2163: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2164: Properties of each modifier.

Id	Name	SBO
mRNA_M_Dri	mRNA_M_Dri	

#### Product

Table 2165: Properties of each product.

Id	Name	SBO
PROTEIN_M_Dri	PROTEIN_M_Dri	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{558} = P_{k\_translation} \cdot [\text{mRNA\_M\_Dri}] \quad (1228)$$

Table 2166: Properties of each parameter.

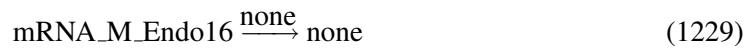
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.559 Reaction mRNA\_M\_Endo16\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Endo16\_degradation

#### Reaction equation



#### Reactant

Table 2167: Properties of each reactant.

Id	Name	SBO
mRNA_M_Endo16	mRNA_M_Endo16	

#### Modifier

Table 2168: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2169: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{559} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Endo16}] \quad (1230)$$

Table 2170: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.560 Reaction mRNA\_M\_Endo16\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Endo16\_translation

#### Reaction equation



#### Reactant

Table 2171: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2172: Properties of each modifier.

Id	Name	SBO
mRNA_M_Endo16	mRNA_M_Endo16	

#### Product

Table 2173: Properties of each product.

Id	Name	SBO
PROTEIN_M_Endo16	PROTEIN_M_Endo16	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{560} = P_{\text{k\_translation}} \cdot [\text{mRNA\_M\_Endo16}] \quad (1232)$$

Table 2174: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.561 Reaction mRNA\_M\_Erg\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Erg\_degradation

#### Reaction equation



#### Reactant

Table 2175: Properties of each reactant.

Id	Name	SBO
mRNA_M_Erg	mRNA_M_Erg	

#### Modifier

Table 2176: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2177: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{561} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Erg}] \quad (1234)$$

Table 2178: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.562 Reaction mRNA\_M\_Erg\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Erg\_translation

### Reaction equation



### Reactant

Table 2179: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2180: Properties of each modifier.

Id	Name	SBO
mRNA_M_Erg	mRNA_M_Erg	

### Product

Table 2181: Properties of each product.

Id	Name	SBO
PROTEIN_M_Erg	PROTEIN_M_Erg	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{562} = P_{k\_translation} \cdot [\text{mRNA\_M\_Erg}] \quad (1236)$$

Table 2182: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.563 Reaction mRNA\_M\_Ets1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Ets1\_degradation

#### Reaction equation



#### Reactant

Table 2183: Properties of each reactant.

Id	Name	SBO
mRNA_M_Ets1	mRNA_M_Ets1	

#### Modifier

Table 2184: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2185: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{563} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Ets1}] \quad (1238)$$

Table 2186: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.564 Reaction mRNA\_M\_Ets1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Ets1\_translation

#### Reaction equation



#### Reactant

Table 2187: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2188: Properties of each modifier.

Id	Name	SBO
mRNA_M_Ets1	mRNA_M_Ets1	

#### Product

Table 2189: Properties of each product.

Id	Name	SBO
PROTEIN_M_Ets1	PROTEIN_M_Ets1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{564} = P_{k\_translation} \cdot [\text{mRNA\_M\_Ets1}] \quad (1240)$$

Table 2190: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.565 Reaction mRNA\_M\_Eve\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Eve\_degradation

**Reaction equation**



**Reactant**

Table 2191: Properties of each reactant.

Id	Name	SBO
mRNA_M_Eve	mRNA_M_Eve	

**Modifier**

Table 2192: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2193: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{565} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Eve}] \quad (1242)$$

Table 2194: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.566 Reaction mRNA\_M\_Eve\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Eve\_translation

#### Reaction equation



#### Reactant

Table 2195: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2196: Properties of each modifier.

Id	Name	SBO
mRNA_M_Eve	mRNA_M_Eve	

#### Product

Table 2197: Properties of each product.

Id	Name	SBO
PROTEIN_M_Eve	PROTEIN_M_Eve	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{566} = P_{k\_translation} \cdot [\text{mRNA\_M\_Eve}] \quad (1244)$$

Table 2198: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.567 Reaction mRNA\_M\_Ficolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Ficolin\_degradation

**Reaction equation**



**Reactant**

Table 2199: Properties of each reactant.

Id	Name	SBO
mRNA_M_Ficolin	mRNA_M_Ficolin	

**Modifier**

Table 2200: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2201: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{567} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Ficolin}] \quad (1246)$$

Table 2202: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.568 Reaction mRNA\_M\_Ficolin\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Ficolin.translation

#### Reaction equation



#### Reactant

Table 2203: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2204: Properties of each modifier.

Id	Name	SBO
mRNA_M_Ficolin	mRNA_M_Ficolin	

#### Product

Table 2205: Properties of each product.

Id	Name	SBO
PROTEIN_M_Ficolin	PROTEIN_M_Ficolin	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{568} = P\_k\_translation \cdot [\text{mRNA\_M\_Ficolin}] \quad (1248)$$

Table 2206: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.569 Reaction mRNA\_M\_FoxA\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxA\_degradation

**Reaction equation**



**Reactant**

Table 2207: Properties of each reactant.

Id	Name	SBO
mRNA_M_FoxA	mRNA_M_FoxA	

**Modifier**

Table 2208: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2209: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{569} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_FoxA}] \quad (1250)$$

Table 2210: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.570 Reaction mRNA\_M\_FoxA\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxA\_translation

#### Reaction equation



#### Reactant

Table 2211: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2212: Properties of each modifier.

Id	Name	SBO
mRNA_M_FoxA	mRNA_M_FoxA	

#### Product

Table 2213: Properties of each product.

Id	Name	SBO
PROTEIN_M_FoxA	PROTEIN_M_FoxA	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{570} = P_{k\_translation} \cdot [\text{mRNA\_M\_FoxA}] \quad (1252)$$

Table 2214: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.571 Reaction mRNA\_M\_FoxB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxB\_degradation

#### Reaction equation



#### Reactant

Table 2215: Properties of each reactant.

Id	Name	SBO
mRNA_M_FoxB	mRNA_M_FoxB	

#### Modifier

Table 2216: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2217: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{571} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_FoxB}] \quad (1254)$$

Table 2218: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.572 Reaction mRNA\_M\_FoxB\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxB\_translation

#### Reaction equation



#### Reactant

Table 2219: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2220: Properties of each modifier.

Id	Name	SBO
mRNA_M_FoxB	mRNA_M_FoxB	

#### Product

Table 2221: Properties of each product.

Id	Name	SBO
PROTEIN_M_FoxB	PROTEIN_M_FoxB	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{572} = P_{k\_translation} \cdot [\text{mRNA\_M\_FoxB}] \quad (1256)$$

Table 2222: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.573 Reaction mRNA\_M\_FoxN23\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxN23\_degradation

#### Reaction equation



#### Reactant

Table 2223: Properties of each reactant.

Id	Name	SBO
mRNA_M_FoxN23	mRNA_M_FoxN23	

#### Modifier

Table 2224: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2225: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{573} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_FoxN23}] \quad (1258)$$

Table 2226: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.574 Reaction mRNA\_M\_FoxN23\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxN23\_translation

#### Reaction equation



#### Reactant

Table 2227: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2228: Properties of each modifier.

Id	Name	SBO
mRNA_M_FoxN23	mRNA_M_FoxN23	

#### Product

Table 2229: Properties of each product.

Id	Name	SBO
PROTEIN_M_FoxN23	PROTEIN_M_FoxN23	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{574} = P_{k\_translation} \cdot [\text{mRNA\_M\_FoxN23}] \quad (1260)$$

Table 2230: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.575 Reaction mRNA\_M\_FoxO\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxO\_degradation

#### Reaction equation



#### Reactant

Table 2231: Properties of each reactant.

Id	Name	SBO
mRNA_M_FoxO	mRNA_M_FoxO	

#### Modifier

Table 2232: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2233: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{575} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_FoxO}] \quad (1262)$$

Table 2234: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.576 Reaction mRNA\_M\_FoxO\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FoxO\_translation

#### Reaction equation



#### Reactant

Table 2235: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2236: Properties of each modifier.

Id	Name	SBO
mRNA_M_FoxO	mRNA_M_FoxO	

#### Product

Table 2237: Properties of each product.

Id	Name	SBO
PROTEIN_M_FoxO	PROTEIN_M_FoxO	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{576} = P_{k\_translation} \cdot [\text{mRNA\_M\_FoxO}] \quad (1264)$$

Table 2238: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.577 Reaction mRNA\_M\_FvMo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FvMo\_degradation

#### Reaction equation



#### Reactant

Table 2239: Properties of each reactant.

Id	Name	SBO
mRNA_M_FvMo	mRNA_M_FvMo	

#### Modifier

Table 2240: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2241: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{577} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_FvMo}] \quad (1266)$$

Table 2242: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.578 Reaction mRNA\_M\_FvMo\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_FvMo\_translation

#### Reaction equation



#### Reactant

Table 2243: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2244: Properties of each modifier.

Id	Name	SBO
mRNA_M_FvMo	mRNA_M_FvMo	

#### Product

Table 2245: Properties of each product.

Id	Name	SBO
PROTEIN_M_FvMo	PROTEIN_M_FvMo	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{578} = P_{k\_translation} \cdot [\text{mRNA\_M\_FvMo}] \quad (1268)$$

Table 2246: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.579 Reaction mRNA\_M\_GataC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_GataC\_degradation

#### Reaction equation



#### Reactant

Table 2247: Properties of each reactant.

Id	Name	SBO
mRNA_M_GataC	mRNA_M_GataC	

#### Modifier

Table 2248: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2249: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{579} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_GataC}] \quad (1270)$$

Table 2250: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.580 Reaction mRNA\_M\_GataC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_GataC\_translation

#### Reaction equation



#### Reactant

Table 2251: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2252: Properties of each modifier.

Id	Name	SBO
mRNA_M_GataC	mRNA_M_GataC	

#### Product

Table 2253: Properties of each product.

Id	Name	SBO
PROTEIN_M_GataC	PROTEIN_M_GataC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{580} = P_{k\_translation} \cdot [\text{mRNA\_M\_GataC}] \quad (1272)$$

Table 2254: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.581 Reaction mRNA\_M\_GataE\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_GataE\_degradation

#### Reaction equation



#### Reactant

Table 2255: Properties of each reactant.

Id	Name	SBO
mRNA_M_GataE	mRNA_M_GataE	

#### Modifier

Table 2256: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2257: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{581} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_GataE}] \quad (1274)$$

Table 2258: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.582 Reaction mRNA\_M\_GataE\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_GataE\_translation

**Reaction equation**



**Reactant**

Table 2259: Properties of each reactant.

Id	Name	SBO
none	none	

**Modifier**

Table 2260: Properties of each modifier.

Id	Name	SBO
mRNA_M_GataE	mRNA_M_GataE	

**Product**

Table 2261: Properties of each product.

Id	Name	SBO
PROTEIN_M_GataE	PROTEIN_M_GataE	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{582} = P_{k\_translation} \cdot [\text{mRNA\_M\_GataE}] \quad (1276)$$

Table 2262: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.583 Reaction mRNA\_M\_Gcad\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Gcad\_degradation

**Reaction equation**



**Reactant**

Table 2263: Properties of each reactant.

Id	Name	SBO
mRNA_M_Gcad	mRNA_M_Gcad	

**Modifier**

Table 2264: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2265: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{583} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Gcad}] \quad (1278)$$

Table 2266: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.584 Reaction mRNA\_M\_Gcad\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Gcad\_translation

#### Reaction equation



#### Reactant

Table 2267: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2268: Properties of each modifier.

Id	Name	SBO
mRNA_M_Gcad	mRNA_M_Gcad	

#### Product

Table 2269: Properties of each product.

Id	Name	SBO
PROTEIN_M_Gcad	PROTEIN_M_Gcad	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{584} = P.k\_translation \cdot [\text{mRNA\_M\_Gcad}] \quad (1280)$$

Table 2270: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.585 Reaction mRNA\_M\_Gcm\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Gcm\_degradation

#### Reaction equation



#### Reactant

Table 2271: Properties of each reactant.

Id	Name	SBO
mRNA_M_Gcm	mRNA_M_Gcm	

#### Modifier

Table 2272: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2273: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{585} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Gcm}] \quad (1282)$$

Table 2274: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.586 Reaction mRNA\_M\_Gcm\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Gcm\_translation

#### Reaction equation



#### Reactant

Table 2275: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2276: Properties of each modifier.

Id	Name	SBO
mRNA_M_Gcm	mRNA_M_Gcm	

#### Product

Table 2277: Properties of each product.

Id	Name	SBO
PROTEIN_M_Gcm	PROTEIN_M_Gcm	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{586} = P_{k\_translation} \cdot [\text{mRNA\_M\_Gcm}] \quad (1284)$$

Table 2278: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.587 Reaction mRNA\_M\_Gelsolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Gelsolin\_degradation

**Reaction equation**



**Reactant**

Table 2279: Properties of each reactant.

Id	Name	SBO
mRNA_M_Gelsolin	mRNA_M_Gelsolin	

**Modifier**

Table 2280: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2281: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{587} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Gelsolin}] \quad (1286)$$

Table 2282: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.588 Reaction mRNA\_M\_Gelsolin\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Gelsolin\_translation

#### Reaction equation



#### Reactant

Table 2283: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2284: Properties of each modifier.

Id	Name	SBO
mRNA_M_Gelsolin	mRNA_M_Gelsolin	

#### Product

Table 2285: Properties of each product.

Id	Name	SBO
PROTEIN_M_Gelsolin	PROTEIN_M_Gelsolin	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{588} = P_{k\_translation} \cdot [\text{mRNA\_M\_Gelsolin}] \quad (1288)$$

Table 2286: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.589 Reaction mRNA\_M\_HesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_HesC\_degradation

**Reaction equation**



**Reactant**

Table 2287: Properties of each reactant.

Id	Name	SBO
mRNA_M_HesC	mRNA_M_HesC	

**Modifier**

Table 2288: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2289: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{589} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_HesC}] \quad (1290)$$

Table 2290: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.590 Reaction mRNA\_M\_HesC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_HesC\_translation

#### Reaction equation



#### Reactant

Table 2291: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2292: Properties of each modifier.

Id	Name	SBO
mRNA_M_HesC	mRNA_M_HesC	

#### Product

Table 2293: Properties of each product.

Id	Name	SBO
PROTEIN_M_HesC	PROTEIN_M_HesC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{590} = P_{k\_translation} \cdot [\text{mRNA\_M\_HesC}] \quad (1292)$$

Table 2294: Properties of each parameter.

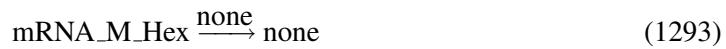
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.591 Reaction mRNA\_M\_Hex\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Hex\_degradation

### Reaction equation



### Reactant

Table 2295: Properties of each reactant.

Id	Name	SBO
mRNA_M_Hex	mRNA_M_Hex	

### Modifier

Table 2296: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2297: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{591} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Hex}] \quad (1294)$$

Table 2298: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.592 Reaction mRNA\_M\_Hex\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Hex\_translation

### Reaction equation



### Reactant

Table 2299: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2300: Properties of each modifier.

Id	Name	SBO
mRNA_M_Hex	mRNA_M_Hex	

### Product

Table 2301: Properties of each product.

Id	Name	SBO
PROTEIN_M_Hex	PROTEIN_M_Hex	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{592} = P_k\_translation \cdot [\text{mRNA\_M\_Hex}] \quad (1296)$$

Table 2302: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.593 Reaction mRNA\_M\_Hnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Hnf6\_degradation

**Reaction equation**



**Reactant**

Table 2303: Properties of each reactant.

Id	Name	SBO
mRNA_M_Hnf6	mRNA_M_Hnf6	

**Modifier**

Table 2304: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2305: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{593} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Hnf6}] \quad (1298)$$

Table 2306: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.594 Reaction mRNA\_M\_Hnf6\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Hnf6\_translation

#### Reaction equation



#### Reactant

Table 2307: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2308: Properties of each modifier.

Id	Name	SBO
mRNA_M_Hnf6	mRNA_M_Hnf6	

#### Product

Table 2309: Properties of each product.

Id	Name	SBO
PROTEIN_M_Hnf6	PROTEIN_M_Hnf6	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{594} = P_{\text{k\_translation}} \cdot [\text{mRNA\_M\_Hnf6}] \quad (1300)$$

Table 2310: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.595 Reaction mRNA\_M\_Hox\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Hox\_degradation

**Reaction equation**



**Reactant**

Table 2311: Properties of each reactant.

Id	Name	SBO
mRNA_M_Hox	mRNA_M_Hox	

**Modifier**

Table 2312: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2313: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{595} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Hox}] \quad (1302)$$

Table 2314: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.596 Reaction mRNA\_M\_Hox\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Hox\_translation

#### Reaction equation



#### Reactant

Table 2315: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2316: Properties of each modifier.

Id	Name	SBO
mRNA_M_Hox	mRNA_M_Hox	

#### Product

Table 2317: Properties of each product.

Id	Name	SBO
PROTEIN_M_Hox	PROTEIN_M_Hox	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{596} = P_{k\_translation} \cdot [\text{mRNA\_M\_Hox}] \quad (1304)$$

Table 2318: Properties of each parameter.

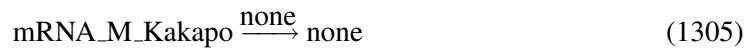
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.597 Reaction mRNA\_M\_Kakapo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Kakapo\_degradation

#### Reaction equation



#### Reactant

Table 2319: Properties of each reactant.

Id	Name	SBO
mRNA_M_Kakapo	mRNA_M_Kakapo	

#### Modifier

Table 2320: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2321: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{597} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Kakapo}] \quad (1306)$$

Table 2322: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.598 Reaction mRNA\_M\_Kakapo\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Kakapo\_translation

#### Reaction equation



#### Reactant

Table 2323: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2324: Properties of each modifier.

Id	Name	SBO
mRNA_M_Kakapo	mRNA_M_Kakapo	

#### Product

Table 2325: Properties of each product.

Id	Name	SBO
PROTEIN_M_Kakapo	PROTEIN_M_Kakapo	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{598} = P_{\text{k\_translation}} \cdot [\text{mRNA\_M\_Kakapo}] \quad (1308)$$

Table 2326: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.599 Reaction mRNA\_M\_Lim\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Lim\_degradation

**Reaction equation**



**Reactant**

Table 2327: Properties of each reactant.

Id	Name	SBO
mRNA_M_Lim	mRNA_M_Lim	

**Modifier**

Table 2328: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2329: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{599} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Lim}] \quad (1310)$$

Table 2330: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.600 Reaction mRNA\_M\_Lim\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Lim\_translation

### Reaction equation



### Reactant

Table 2331: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2332: Properties of each modifier.

Id	Name	SBO
mRNA_M_Lim	mRNA_M_Lim	

### Product

Table 2333: Properties of each product.

Id	Name	SBO
PROTEIN_M_Lim	PROTEIN_M_Lim	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{600} = P_k\_translation \cdot [\text{mRNA\_M\_Lim}] \quad (1312)$$

Table 2334: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.601 Reaction mRNA\_M\_Msp130\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Msp130\_degradation

### Reaction equation



### Reactant

Table 2335: Properties of each reactant.

Id	Name	SBO
mRNA_M_Msp130	mRNA_M_Msp130	

### Modifier

Table 2336: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2337: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{601} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Msp130}] \quad (1314)$$

Table 2338: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.602 Reaction mRNA\_M\_Msp130\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Msp130\_translation

### Reaction equation



### Reactant

Table 2339: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2340: Properties of each modifier.

Id	Name	SBO
mRNA_M_Msp130	mRNA_M_Msp130	

### Product

Table 2341: Properties of each product.

Id	Name	SBO
PROTEIN_M_Msp130	PROTEIN_M_Msp130	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{602} = P_{\text{k\_translation}} \cdot [\text{mRNA\_M\_Msp130}] \quad (1316)$$

Table 2342: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.603 Reaction mRNA\_M\_MspL\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_MspL\_degradation

**Reaction equation**



**Reactant**

Table 2343: Properties of each reactant.

Id	Name	SBO
mRNA_M_MspL	mRNA_M_MspL	

**Modifier**

Table 2344: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2345: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{603} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_MspL}] \quad (1318)$$

Table 2346: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.604 Reaction mRNA\_M\_MspL\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_MspL\_translation

### Reaction equation



### Reactant

Table 2347: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2348: Properties of each modifier.

Id	Name	SBO
mRNA_M_MspL	mRNA_M_MspL	

### Product

Table 2349: Properties of each product.

Id	Name	SBO
PROTEIN_M_MspL	PROTEIN_M_MspL	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{604} = P_{k\_translation} \cdot [\text{mRNA\_M\_MspL}] \quad (1320)$$

Table 2350: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.605 Reaction mRNA\_M\_Not\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Not\_degradation

**Reaction equation**



**Reactant**

Table 2351: Properties of each reactant.

Id	Name	SBO
mRNA_M_Not	mRNA_M_Not	

**Modifier**

Table 2352: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2353: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{605} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_M\_Not}] \quad (1322)$$

Table 2354: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.606 Reaction mRNA\_M\_Not\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Not\_translation

### Reaction equation



### Reactant

Table 2355: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2356: Properties of each modifier.

Id	Name	SBO
mRNA_M_Not	mRNA_M_Not	

### Product

Table 2357: Properties of each product.

Id	Name	SBO
PROTEIN_M_Not	PROTEIN_M_Not	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{606} = P_{k\_translation} \cdot [\text{mRNA\_M\_Not}] \quad (1324)$$

Table 2358: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.607 Reaction mRNA\_M\_Notch\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Notch\_degradation

#### Reaction equation



#### Reactant

Table 2359: Properties of each reactant.

Id	Name	SBO
mRNA_M_Notch	mRNA_M_Notch	

#### Modifier

Table 2360: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2361: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{607} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Notch}] \quad (1326)$$

Table 2362: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.608 Reaction mRNA\_M\_Notch\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Notch\_translation

#### Reaction equation



#### Reactant

Table 2363: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2364: Properties of each modifier.

Id	Name	SBO
mRNA_M_Notch	mRNA_M_Notch	

#### Product

Table 2365: Properties of each product.

Id	Name	SBO
PROTEIN_M_Notch	PROTEIN_M_Notch	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{608} = P_{k\_translation} \cdot [\text{mRNA\_M\_Notch}] \quad (1328)$$

Table 2366: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.609 Reaction mRNA\_M\_Nrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Nrl\_degradation

**Reaction equation**



**Reactant**

Table 2367: Properties of each reactant.

Id	Name	SBO
mRNA_M_Nrl	mRNA_M_Nrl	

**Modifier**

Table 2368: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2369: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{609} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Nrl}] \quad (1330)$$

Table 2370: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.610 Reaction mRNA\_M\_Nrl\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Nrl\_translation

### Reaction equation



### Reactant

Table 2371: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2372: Properties of each modifier.

Id	Name	SBO
mRNA_M_Nrl	mRNA_M_Nrl	

### Product

Table 2373: Properties of each product.

Id	Name	SBO
PROTEIN_M_Nrl	PROTEIN_M_Nrl	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{610} = P_{k\_translation} \cdot [\text{mRNA\_M\_Nrl}] \quad (1332)$$

Table 2374: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.611 Reaction mRNA\_M\_OrCt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_OrCt\_degradation

**Reaction equation**



**Reactant**

Table 2375: Properties of each reactant.

Id	Name	SBO
mRNA_M_OrCt	mRNA_M_OrCt	

**Modifier**

Table 2376: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2377: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{611} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_OrCt}] \quad (1334)$$

Table 2378: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.612 Reaction mRNA\_M\_OrCt\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_OrCt\_translation

#### Reaction equation



#### Reactant

Table 2379: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2380: Properties of each modifier.

Id	Name	SBO
mRNA_M_OrCt	mRNA_M_OrCt	

#### Product

Table 2381: Properties of each product.

Id	Name	SBO
PROTEIN_M_OrCt	PROTEIN_M_OrCt	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{612} = P_{k\_translation} \cdot [\text{mRNA\_M\_OrCt}] \quad (1336)$$

Table 2382: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.613 Reaction mRNA\_M\_Otx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Otx\_degradation

#### Reaction equation



#### Reactant

Table 2383: Properties of each reactant.

Id	Name	SBO
mRNA_M_Otx	mRNA_M_Otx	

#### Modifier

Table 2384: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2385: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{613} = P_{\text{mRNA.deg}} \cdot [\text{mRNA\_M\_Otx}] \quad (1338)$$

Table 2386: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.614 Reaction mRNA\_M\_Otx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Otx\_translation

#### Reaction equation



#### Reactant

Table 2387: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2388: Properties of each modifier.

Id	Name	SBO
mRNA_M_Otx	mRNA_M_Otx	

#### Product

Table 2389: Properties of each product.

Id	Name	SBO
PROTEIN_M_Otx	PROTEIN_M_Otx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{614} = P_{k\_translation} \cdot [\text{mRNA\_M\_Otx}] \quad (1340)$$

Table 2390: Properties of each parameter.

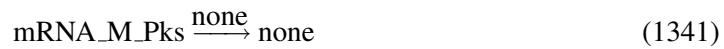
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.615 Reaction mRNA\_M\_Pks\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Pks\_degradation

**Reaction equation**



**Reactant**

Table 2391: Properties of each reactant.

Id	Name	SBO
mRNA_M_Pks	mRNA_M_Pks	

**Modifier**

Table 2392: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2393: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{615} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Pks}] \quad (1342)$$

Table 2394: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.616 Reaction mRNA\_M\_Pks\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Pks\_translation

#### Reaction equation



#### Reactant

Table 2395: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2396: Properties of each modifier.

Id	Name	SBO
mRNA_M_Pks	mRNA_M_Pks	

#### Product

Table 2397: Properties of each product.

Id	Name	SBO
PROTEIN_M_Pks	PROTEIN_M_Pks	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{616} = P_{k\_translation} \cdot [\text{mRNA\_M\_Pks}] \quad (1344)$$

Table 2398: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.617 Reaction mRNA\_M\_Pmar1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Pmar1\_degradation

#### Reaction equation



#### Reactant

Table 2399: Properties of each reactant.

Id	Name	SBO
mRNA_M_Pmar1	mRNA_M_Pmar1	

#### Modifier

Table 2400: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2401: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{617} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Pmar1}] \quad (1346)$$

Table 2402: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.618 Reaction mRNA\_M\_Pmar1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Pmar1\_translation

#### Reaction equation



#### Reactant

Table 2403: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2404: Properties of each modifier.

Id	Name	SBO
mRNA_M_Pmar1	mRNA_M_Pmar1	

#### Product

Table 2405: Properties of each product.

Id	Name	SBO
PROTEIN_M_Pmar1	PROTEIN_M_Pmar1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{618} = P_{k\_translation} \cdot [\text{mRNA\_M\_Pmar1}] \quad (1348)$$

Table 2406: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.619 Reaction mRNA\_M\_Sm27\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Sm27\_degradation

#### Reaction equation



#### Reactant

Table 2407: Properties of each reactant.

Id	Name	SBO
mRNA_M_Sm27	mRNA_M_Sm27	

#### Modifier

Table 2408: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2409: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{619} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Sm27}] \quad (1350)$$

Table 2410: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.620 Reaction mRNA\_M\_Sm27\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Sm27\_translation

### Reaction equation



### Reactant

Table 2411: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2412: Properties of each modifier.

Id	Name	SBO
mRNA_M_Sm27	mRNA_M_Sm27	

### Product

Table 2413: Properties of each product.

Id	Name	SBO
PROTEIN_M_Sm27	PROTEIN_M_Sm27	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{620} = P_{k\_translation} \cdot [\text{mRNA\_M\_Sm27}] \quad (1352)$$

Table 2414: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.621 Reaction mRNA\_M\_Sm30\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Sm30\_degradation

**Reaction equation**



**Reactant**

Table 2415: Properties of each reactant.

Id	Name	SBO
mRNA_M_Sm30	mRNA_M_Sm30	

**Modifier**

Table 2416: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2417: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{621} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Sm30}] \quad (1354)$$

Table 2418: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.622 Reaction mRNA\_M\_Sm30\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Sm30\_translation

### Reaction equation



### Reactant

Table 2419: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2420: Properties of each modifier.

Id	Name	SBO
mRNA_M_Sm30	mRNA_M_Sm30	

### Product

Table 2421: Properties of each product.

Id	Name	SBO
PROTEIN_M_Sm30	PROTEIN_M_Sm30	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{622} = P_{k\_translation} \cdot [\text{mRNA\_M\_Sm30}] \quad (1356)$$

Table 2422: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.623 Reaction mRNA\_M\_Sm50\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Sm50\_degradation

**Reaction equation**



**Reactant**

Table 2423: Properties of each reactant.

Id	Name	SBO
mRNA_M_Sm50	mRNA_M_Sm50	

**Modifier**

Table 2424: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2425: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{623} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Sm50}] \quad (1358)$$

Table 2426: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.624 Reaction mRNA\_M\_Sm50\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Sm50\_translation

#### Reaction equation



#### Reactant

Table 2427: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2428: Properties of each modifier.

Id	Name	SBO
mRNA_M_Sm50	mRNA_M_Sm50	

#### Product

Table 2429: Properties of each product.

Id	Name	SBO
PROTEIN_M_Sm50	PROTEIN_M_Sm50	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{624} = P_{k\_translation} \cdot [\text{mRNA\_M\_Sm50}] \quad (1360)$$

Table 2430: Properties of each parameter.

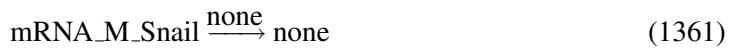
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.625 Reaction mRNA\_M\_Snail\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Snail\_degradation

**Reaction equation**



**Reactant**

Table 2431: Properties of each reactant.

Id	Name	SBO
mRNA_M_Snail	mRNA_M_Snail	

**Modifier**

Table 2432: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2433: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{625} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Snail}] \quad (1362)$$

Table 2434: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.626 Reaction mRNA\_M\_Snail\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Snail\_translation

#### Reaction equation



#### Reactant

Table 2435: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2436: Properties of each modifier.

Id	Name	SBO
mRNA_M_Snail	mRNA_M_Snail	

#### Product

Table 2437: Properties of each product.

Id	Name	SBO
PROTEIN_M_Snail	PROTEIN_M_Snail	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{626} = P_{\text{k\_translation}} \cdot [\text{mRNA\_M\_Snail}] \quad (1364)$$

Table 2438: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.627 Reaction mRNA\_M\_SoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SoxB1\_degradation

**Reaction equation**



**Reactant**

Table 2439: Properties of each reactant.

Id	Name	SBO
mRNA_M_SoxB1	mRNA_M_SoxB1	

**Modifier**

Table 2440: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2441: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{627} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_SoxB1}] \quad (1366)$$

Table 2442: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.628 Reaction mRNA\_M\_SoxB1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SoxB1\_translation

#### Reaction equation



#### Reactant

Table 2443: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2444: Properties of each modifier.

Id	Name	SBO
mRNA_M_SoxB1	mRNA_M_SoxB1	

#### Product

Table 2445: Properties of each product.

Id	Name	SBO
PROTEIN_M_SoxB1	PROTEIN_M_SoxB1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{628} = P_{k\_translation} \cdot [\text{mRNA\_M\_SoxB1}] \quad (1368)$$

Table 2446: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.629 Reaction mRNA\_M\_SoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SoxC\_degradation

### Reaction equation



### Reactant

Table 2447: Properties of each reactant.

Id	Name	SBO
mRNA_M_SoxC	mRNA_M_SoxC	

### Modifier

Table 2448: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2449: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{629} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_SoxC}] \quad (1370)$$

Table 2450: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.630 Reaction mRNA\_M\_SoxC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SoxC\_translation

#### Reaction equation



#### Reactant

Table 2451: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2452: Properties of each modifier.

Id	Name	SBO
mRNA_M_SoxC	mRNA_M_SoxC	

#### Product

Table 2453: Properties of each product.

Id	Name	SBO
PROTEIN_M_SoxC	PROTEIN_M_SoxC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{630} = P_{k\_translation} \cdot [\text{mRNA\_M\_SoxC}] \quad (1372)$$

Table 2454: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.631 Reaction mRNA\_M\_SuH\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SuH\_degradation

#### Reaction equation



#### Reactant

Table 2455: Properties of each reactant.

Id	Name	SBO
mRNA_M_SuH	mRNA_M_SuH	

#### Modifier

Table 2456: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2457: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{631} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_SuH}] \quad (1374)$$

Table 2458: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.632 Reaction mRNA\_M\_SuH\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SuH\_translation

#### Reaction equation



#### Reactant

Table 2459: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2460: Properties of each modifier.

Id	Name	SBO
mRNA_M_SuH	mRNA_M_SuH	

#### Product

Table 2461: Properties of each product.

Id	Name	SBO
PROTEIN_M_SuH	PROTEIN_M_SuH	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{632} = P_{k\_translation} \cdot [\text{mRNA\_M\_SuH}] \quad (1376)$$

Table 2462: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.633 Reaction mRNA\_M\_SuTx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SuTx\_degradation

**Reaction equation**



**Reactant**

Table 2463: Properties of each reactant.

Id	Name	SBO
mRNA_M_SuTx	mRNA_M_SuTx	

**Modifier**

Table 2464: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2465: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{633} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_SuTx}] \quad (1378)$$

Table 2466: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.634 Reaction mRNA\_M\_SuTx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_SuTx\_translation

#### Reaction equation



#### Reactant

Table 2467: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2468: Properties of each modifier.

Id	Name	SBO
mRNA_M_SuTx	mRNA_M_SuTx	

#### Product

Table 2469: Properties of each product.

Id	Name	SBO
PROTEIN_M_SuTx	PROTEIN_M_SuTx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{634} = P_{k\_translation} \cdot [\text{mRNA\_M\_SuTx}] \quad (1380)$$

Table 2470: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.635 Reaction mRNA\_M\_TBr\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_TBr\_degradation

**Reaction equation**



**Reactant**

Table 2471: Properties of each reactant.

Id	Name	SBO
mRNA_M_TBr	mRNA_M_TBr	

**Modifier**

Table 2472: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2473: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{635} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_TBr}] \quad (1382)$$

Table 2474: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.636 Reaction mRNA\_M\_TBr\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_TBr\_translation

#### Reaction equation



#### Reactant

Table 2475: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2476: Properties of each modifier.

Id	Name	SBO
mRNA_M_TBr	mRNA_M_TBr	

#### Product

Table 2477: Properties of each product.

Id	Name	SBO
PROTEIN_M_TBr	PROTEIN_M_TBr	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{636} = P_k\_translation \cdot [\text{mRNA\_M\_TBr}] \quad (1384)$$

Table 2478: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.637 Reaction mRNA\_M\_Tel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Tel\_degradation

**Reaction equation**



**Reactant**

Table 2479: Properties of each reactant.

Id	Name	SBO
mRNA_M_Tel	mRNA_M_Tel	

**Modifier**

Table 2480: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2481: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{637} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Tel}] \quad (1386)$$

Table 2482: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.638 Reaction mRNA\_M\_Tel\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Tel\_translation

#### Reaction equation



#### Reactant

Table 2483: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2484: Properties of each modifier.

Id	Name	SBO
mRNA_M_Tel	mRNA_M_Tel	

#### Product

Table 2485: Properties of each product.

Id	Name	SBO
PROTEIN_M_Tel	PROTEIN_M_Tel	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{638} = P_{k\_translation} \cdot [\text{mRNA\_M\_Tel}] \quad (1388)$$

Table 2486: Properties of each parameter.

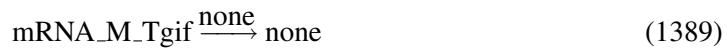
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.639 Reaction mRNA\_M\_Tgif\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Tgif\_degradation

**Reaction equation**



**Reactant**

Table 2487: Properties of each reactant.

Id	Name	SBO
mRNA_M_Tgif	mRNA_M_Tgif	

**Modifier**

Table 2488: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2489: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{639} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Tgif}] \quad (1390)$$

Table 2490: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.640 Reaction mRNA\_M\_Tgif\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Tgif\_translation

### Reaction equation



### Reactant

Table 2491: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2492: Properties of each modifier.

Id	Name	SBO
mRNA_M_Tgif	mRNA_M_Tgif	

### Product

Table 2493: Properties of each product.

Id	Name	SBO
PROTEIN_M_Tgif	PROTEIN_M_Tgif	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{640} = P_{k\_translation} \cdot [\text{mRNA\_M\_Tgif}] \quad (1392)$$

Table 2494: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.641 Reaction mRNA\_M\_UMADelta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UMADelta\_degradation

#### Reaction equation



#### Reactant

Table 2495: Properties of each reactant.

Id	Name	SBO
mRNA_M_UMADelta	mRNA_M_UMADelta	

#### Modifier

Table 2496: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2497: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{641} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_UMADelta}] \quad (1394)$$

Table 2498: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.642 Reaction mRNA\_M\_UMADelta\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UMADelta\_translation

### Reaction equation



### Reactant

Table 2499: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2500: Properties of each modifier.

Id	Name	SBO
mRNA_M_UMADelta	mRNA_M_UMADelta	

### Product

Table 2501: Properties of each product.

Id	Name	SBO
PROTEIN_M_UMADelta	PROTEIN_M_UMADelta	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{642} = P_{k\_translation} \cdot [\text{mRNA\_M\_UMADelta}] \quad (1396)$$

Table 2502: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.643 Reaction mRNA\_M\_UMANrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UMANrl\_degradation

**Reaction equation**



**Reactant**

Table 2503: Properties of each reactant.

Id	Name	SBO
mRNA_M_UMANrl	mRNA_M_UMANrl	

**Modifier**

Table 2504: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2505: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{643} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_UMANrl}] \quad (1398)$$

Table 2506: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.644 Reaction mRNA\_M\_UMANrl\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UMANrl\_translation

**Reaction equation**



**Reactant**

Table 2507: Properties of each reactant.

Id	Name	SBO
none	none	

**Modifier**

Table 2508: Properties of each modifier.

Id	Name	SBO
mRNA_M_UMANrl	mRNA_M_UMANrl	

**Product**

Table 2509: Properties of each product.

Id	Name	SBO
PROTEIN_M_UMANrl	PROTEIN_M_UMANrl	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{644} = P_{k\_translation} \cdot [\text{mRNA\_M\_UMANrl}] \quad (1400)$$

Table 2510: Properties of each parameter.

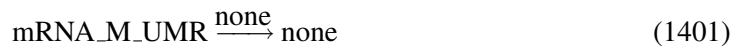
Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.645 Reaction mRNA\_M\_UMR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UMR\_degradation

**Reaction equation**



**Reactant**

Table 2511: Properties of each reactant.

Id	Name	SBO
mRNA_M_UMR	mRNA_M_UMR	

**Modifier**

Table 2512: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2513: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{645} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_UMR}] \quad (1402)$$

Table 2514: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.646 Reaction mRNA\_M\_UMR\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UMR\_translation

#### Reaction equation



#### Reactant

Table 2515: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2516: Properties of each modifier.

Id	Name	SBO
mRNA_M_UMR	mRNA_M_UMR	

#### Product

Table 2517: Properties of each product.

Id	Name	SBO
PROTEIN_M_UMR	PROTEIN_M_UMR	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{646} = P_{k\_translation} \cdot [\text{mRNA\_M\_UMR}] \quad (1404)$$

Table 2518: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.647 Reaction mRNA\_M\_UbiqSoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UbiqSoxB1\_degradation

#### Reaction equation



#### Reactant

Table 2519: Properties of each reactant.

Id	Name	SBO
mRNA_M_UbiqSoxB1	mRNA_M_UbiqSoxB1	

#### Modifier

Table 2520: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2521: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{647} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_UbiqSoxB1}] \quad (1406)$$

Table 2522: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.648 Reaction mRNA\_M\_UbiqSoxB1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_UbiqSoxB1\_translation

#### Reaction equation



#### Reactant

Table 2523: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2524: Properties of each modifier.

Id	Name	SBO
mRNA_M_UbiqSoxB1	mRNA_M_UbiqSoxB1	

#### Product

Table 2525: Properties of each product.

Id	Name	SBO
PROTEIN_M_UbiqSoxB1	PROTEIN_M_UbiqSoxB1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{648} = P_{k\_translation} \cdot [\text{mRNA\_M\_UbiqSoxB1}] \quad (1408)$$

Table 2526: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.649 Reaction mRNA\_M\_VEGFR\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_VEGFR\_degradation

**Reaction equation**



**Reactant**

Table 2527: Properties of each reactant.

Id	Name	SBO
mRNA_M_VEGFR	mRNA_M_VEGFR	

**Modifier**

Table 2528: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2529: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{649} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_VEGFR}] \quad (1410)$$

Table 2530: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.650 Reaction mRNA\_M\_VEGFR\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_VEGFR\_translation

**Reaction equation**



**Reactant**

Table 2531: Properties of each reactant.

Id	Name	SBO
none	none	

**Modifier**

Table 2532: Properties of each modifier.

Id	Name	SBO
mRNA_M_VEGFR	mRNA_M_VEGFR	

**Product**

Table 2533: Properties of each product.

Id	Name	SBO
PROTEIN_M_VEGFR	PROTEIN_M_VEGFR	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{650} = P_{k\_translation} \cdot [\text{mRNA\_M\_VEGFR}] \quad (1412)$$

Table 2534: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.651 Reaction mRNA\_M\_Wnt8\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Wnt8\_degradation

#### Reaction equation



#### Reactant

Table 2535: Properties of each reactant.

Id	Name	SBO
mRNA_M_Wnt8	mRNA_M_Wnt8	

#### Modifier

Table 2536: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2537: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{651} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_Wnt8}] \quad (1414)$$

Table 2538: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.652 Reaction mRNA\_M\_Wnt8\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_Wnt8\_translation

### Reaction equation



### Reactant

Table 2539: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2540: Properties of each modifier.

Id	Name	SBO
mRNA_M_Wnt8	mRNA_M_Wnt8	

### Product

Table 2541: Properties of each product.

Id	Name	SBO
PROTEIN_M_Wnt8	PROTEIN_M_Wnt8	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{652} = P_{k\_translation} \cdot [\text{mRNA\_M\_Wnt8}] \quad (1416)$$

Table 2542: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.653 Reaction mRNA\_M\_cB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_cB\_degradation

#### Reaction equation



#### Reactant

Table 2543: Properties of each reactant.

Id	Name	SBO
mRNA_M_cB	mRNA_M_cB	

#### Modifier

Table 2544: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2545: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{653} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_cB}] \quad (1418)$$

Table 2546: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.654 Reaction mRNA\_M\_cB\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_cB\_translation

### Reaction equation



### Reactant

Table 2547: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2548: Properties of each modifier.

Id	Name	SBO
mRNA_M_cB	mRNA_M_cB	

### Product

Table 2549: Properties of each product.

Id	Name	SBO
PROTEIN_M_cB	PROTEIN_M_cB	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{654} = P_{k\_translation} \cdot [\text{mRNA\_M\_cB}] \quad (1420)$$

Table 2550: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.655 Reaction mRNA\_M\_z13\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_z13\_degradation

**Reaction equation**



**Reactant**

Table 2551: Properties of each reactant.

Id	Name	SBO
mRNA_M_z13	mRNA_M_z13	

**Modifier**

Table 2552: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2553: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{655} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_M\_z13}] \quad (1422)$$

Table 2554: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.656 Reaction mRNA\_M\_z13\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_M\_z13\_translation

#### Reaction equation



#### Reactant

Table 2555: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2556: Properties of each modifier.

Id	Name	SBO
mRNA_M_z13	mRNA_M_z13	

#### Product

Table 2557: Properties of each product.

Id	Name	SBO
PROTEIN_M_z13	PROTEIN_M_z13	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{656} = P_{k\_translation} \cdot [\text{mRNA\_M\_z13}] \quad (1424)$$

Table 2558: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.657 Reaction mRNA\_P\_Alx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Alx1\_degradation

#### Reaction equation



#### Reactant

Table 2559: Properties of each reactant.

Id	Name	SBO
mRNA_P_Alx1	mRNA_P_Alx1	

#### Modifier

Table 2560: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2561: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{657} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Alx1}] \quad (1426)$$

Table 2562: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.658 Reaction mRNA\_P\_Alx1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Alx1\_translation

#### Reaction equation



#### Reactant

Table 2563: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2564: Properties of each modifier.

Id	Name	SBO
mRNA_P_Alx1	mRNA_P_Alx1	

#### Product

Table 2565: Properties of each product.

Id	Name	SBO
PROTEIN_P_Alx1	PROTEIN_P_Alx1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{658} = P_{k\_translation} \cdot [\text{mRNA\_P\_Alx1}] \quad (1428)$$

Table 2566: Properties of each parameter.

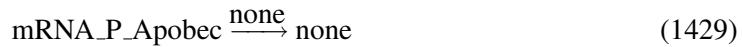
Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.659 Reaction mRNA\_P\_Apobec\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Apobec\_degradation

**Reaction equation**



**Reactant**

Table 2567: Properties of each reactant.

Id	Name	SBO
mRNA_P_Apobec	mRNA_P_Apobec	

**Modifier**

Table 2568: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2569: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{659} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Apobec}] \quad (1430)$$

Table 2570: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.660 Reaction mRNA\_P\_Apobec\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Apobec\_translation

### Reaction equation



### Reactant

Table 2571: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2572: Properties of each modifier.

Id	Name	SBO
mRNA_P_Apobec	mRNA_P_Apobec	

### Product

Table 2573: Properties of each product.

Id	Name	SBO
PROTEIN_P_Apobec	PROTEIN_P_Apobec	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{660} = P_{k\_translation} \cdot [mRNA\_P\_Apobec] \quad (1432)$$

Table 2574: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.661 Reaction mRNA\_P\_Blimp1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Blimp1\_degradation

**Reaction equation**



**Reactant**

Table 2575: Properties of each reactant.

Id	Name	SBO
mRNA_P_Blimp1	mRNA_P_Blimp1	

**Modifier**

Table 2576: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2577: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{661} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Blimp1}] \quad (1434)$$

Table 2578: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.662 Reaction mRNA\_P\_Blimp1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Blimp1\_translation

### Reaction equation



### Reactant

Table 2579: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2580: Properties of each modifier.

Id	Name	SBO
mRNA_P_Blimp1	mRNA_P_Blimp1	

### Product

Table 2581: Properties of each product.

Id	Name	SBO
PROTEIN_P_Blimp1	PROTEIN_P_Blimp1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{662} = P_k_{\text{translation}} \cdot [\text{mRNA\_P\_Blimp1}] \quad (1436)$$

Table 2582: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.663 Reaction mRNA\_P\_Bra\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Bra\_degradation

**Reaction equation**



**Reactant**

Table 2583: Properties of each reactant.

Id	Name	SBO
mRNA_P_Bra	mRNA_P_Bra	

**Modifier**

Table 2584: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2585: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{663} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Bra}] \quad (1438)$$

Table 2586: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.664 Reaction mRNA\_P\_Bra\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Bra\_translation

#### Reaction equation



#### Reactant

Table 2587: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2588: Properties of each modifier.

Id	Name	SBO
mRNA_P_Bra	mRNA_P_Bra	

#### Product

Table 2589: Properties of each product.

Id	Name	SBO
PROTEIN_P_Bra	PROTEIN_P_Bra	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{664} = P_{k\_translation} \cdot [\text{mRNA\_P\_Bra}] \quad (1440)$$

Table 2590: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.665 Reaction mRNA\_P\_Brn\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Brn\_degradation

**Reaction equation**



**Reactant**

Table 2591: Properties of each reactant.

Id	Name	SBO
mRNA_P_Brn	mRNA_P_Brn	

**Modifier**

Table 2592: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2593: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{665} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Brn}] \quad (1442)$$

Table 2594: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.666 Reaction mRNA\_P\_Brn\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Brn\_translation

### Reaction equation



### Reactant

Table 2595: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2596: Properties of each modifier.

Id	Name	SBO
mRNA_P_Brn	mRNA_P_Brn	

### Product

Table 2597: Properties of each product.

Id	Name	SBO
PROTEIN_P_Brn	PROTEIN_P_Brn	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{666} = P.k\_translation \cdot [\text{mRNA\_P\_Brn}] \quad (1444)$$

Table 2598: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.667 Reaction mRNA\_P\_CAPK\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_CAPK\_degradation

#### Reaction equation



#### Reactant

Table 2599: Properties of each reactant.

Id	Name	SBO
mRNA_P_CAPK	mRNA_P_CAPK	

#### Modifier

Table 2600: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2601: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{667} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_CAPK}] \quad (1446)$$

Table 2602: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.668 Reaction mRNA\_P\_CAPK\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_CAPK\_translation

#### Reaction equation



#### Reactant

Table 2603: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2604: Properties of each modifier.

Id	Name	SBO
mRNA_P_CAPK	mRNA_P_CAPK	

#### Product

Table 2605: Properties of each product.

Id	Name	SBO
PROTEIN_P_CAPK	PROTEIN_P_CAPK	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{668} = P\_k\_translation \cdot [\text{mRNA\_P\_CAPK}] \quad (1448)$$

Table 2606: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.669 Reaction mRNA\_P\_CyP\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_CyP\_degradation

**Reaction equation**



**Reactant**

Table 2607: Properties of each reactant.

Id	Name	SBO
mRNA_P_CyP	mRNA_P_CyP	

**Modifier**

Table 2608: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2609: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{669} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_CyP}] \quad (1450)$$

Table 2610: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.670 Reaction mRNA\_P\_CyP\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_CyP\_translation

### Reaction equation



### Reactant

Table 2611: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2612: Properties of each modifier.

Id	Name	SBO
mRNA_P_CyP	mRNA_P_CyP	

### Product

Table 2613: Properties of each product.

Id	Name	SBO
PROTEIN_P_CyP	PROTEIN_P_CyP	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{670} = P_{k\_translation} \cdot [\text{mRNA\_P\_CyP}] \quad (1452)$$

Table 2614: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.671 Reaction mRNA\_P\_Delta\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Delta\_degradation

**Reaction equation**



**Reactant**

Table 2615: Properties of each reactant.

Id	Name	SBO
mRNA_P_Delta	mRNA_P_Delta	

**Modifier**

Table 2616: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2617: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{671} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Delta}] \quad (1454)$$

Table 2618: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.672 Reaction mRNA\_P\_Delta\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Delta\_translation

### Reaction equation



### Reactant

Table 2619: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2620: Properties of each modifier.

Id	Name	SBO
mRNA_P_Delta	mRNA_P_Delta	

### Product

Table 2621: Properties of each product.

Id	Name	SBO
PROTEIN_P_Delta	PROTEIN_P_Delta	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{672} = P\_k\_translation \cdot [\text{mRNA\_P\_Delta}] \quad (1456)$$

Table 2622: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.673 Reaction mRNA\_P\_Dpt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Dpt\_degradation

#### Reaction equation



#### Reactant

Table 2623: Properties of each reactant.

Id	Name	SBO
mRNA_P_Dpt	mRNA_P_Dpt	

#### Modifier

Table 2624: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2625: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{673} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Dpt}] \quad (1458)$$

Table 2626: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.674 Reaction mRNA\_P\_Dpt\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Dpt\_translation

#### Reaction equation



#### Reactant

Table 2627: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2628: Properties of each modifier.

Id	Name	SBO
mRNA_P_Dpt	mRNA_P_Dpt	

#### Product

Table 2629: Properties of each product.

Id	Name	SBO
PROTEIN_P_Dpt	PROTEIN_P_Dpt	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{674} = P.k\_translation \cdot [\text{mRNA\_P\_Dpt}] \quad (1460)$$

Table 2630: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.675 Reaction mRNA\_P\_Dri\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Dri\_degradation

**Reaction equation**



**Reactant**

Table 2631: Properties of each reactant.

Id	Name	SBO
mRNA_P_Dri	mRNA_P_Dri	

**Modifier**

Table 2632: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2633: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{675} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Dri}] \quad (1462)$$

Table 2634: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.676 Reaction mRNA\_P\_Dri\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Dri\_translation

#### Reaction equation



#### Reactant

Table 2635: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2636: Properties of each modifier.

Id	Name	SBO
mRNA_P_Dri	mRNA_P_Dri	

#### Product

Table 2637: Properties of each product.

Id	Name	SBO
PROTEIN_P_Dri	PROTEIN_P_Dri	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{676} = P\_k\_translation \cdot [\text{mRNA\_P\_Dri}] \quad (1464)$$

Table 2638: Properties of each parameter.

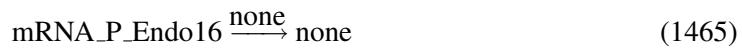
Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.677 Reaction mRNA\_P\_Endo16\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Endo16\_degradation

#### Reaction equation



#### Reactant

Table 2639: Properties of each reactant.

Id	Name	SBO
mRNA_P_Endo16	mRNA_P_Endo16	

#### Modifier

Table 2640: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2641: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{677} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Endo16}] \quad (1466)$$

Table 2642: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.678 Reaction mRNA\_P\_Endo16\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Endo16\_translation

#### Reaction equation



#### Reactant

Table 2643: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2644: Properties of each modifier.

Id	Name	SBO
mRNA_P_Endo16	mRNA_P_Endo16	

#### Product

Table 2645: Properties of each product.

Id	Name	SBO
PROTEIN_P_Endo16	PROTEIN_P_Endo16	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{678} = P\_k\_translation \cdot [\text{mRNA\_P\_Endo16}] \quad (1468)$$

Table 2646: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.679 Reaction mRNA\_P\_Erg\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Erg\_degradation

### Reaction equation



### Reactant

Table 2647: Properties of each reactant.

Id	Name	SBO
mRNA_P_Erg	mRNA_P_Erg	

### Modifier

Table 2648: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2649: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{679} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Erg}] \quad (1470)$$

Table 2650: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.680 Reaction mRNA\_P\_Erg\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Erg\_translation

### Reaction equation



### Reactant

Table 2651: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2652: Properties of each modifier.

Id	Name	SBO
mRNA_P_Erg	mRNA_P_Erg	

### Product

Table 2653: Properties of each product.

Id	Name	SBO
PROTEIN_P_Erg	PROTEIN_P_Erg	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{680} = P_{k\_translation} \cdot [\text{mRNA\_P\_Erg}] \quad (1472)$$

Table 2654: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.681 Reaction mRNA\_P\_Ets1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Ets1\_degradation

### Reaction equation



### Reactant

Table 2655: Properties of each reactant.

Id	Name	SBO
mRNA_P_Ets1	mRNA_P_Ets1	

### Modifier

Table 2656: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2657: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{681} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Ets1}] \quad (1474)$$

Table 2658: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.682 Reaction mRNA\_P\_Ets1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Ets1\_translation

### Reaction equation



### Reactant

Table 2659: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2660: Properties of each modifier.

Id	Name	SBO
mRNA_P_Ets1	mRNA_P_Ets1	

### Product

Table 2661: Properties of each product.

Id	Name	SBO
PROTEIN_P_Ets1	PROTEIN_P_Ets1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{682} = P_{k\_translation} \cdot [\text{mRNA\_P\_Ets1}] \quad (1476)$$

Table 2662: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.683 Reaction mRNA\_P\_Eve\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Eve\_degradation

**Reaction equation**



**Reactant**

Table 2663: Properties of each reactant.

Id	Name	SBO
mRNA_P_Eve	mRNA_P_Eve	

**Modifier**

Table 2664: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2665: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{683} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Eve}] \quad (1478)$$

Table 2666: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.684 Reaction mRNA\_P\_Eve\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Eve\_translation

#### Reaction equation



#### Reactant

Table 2667: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2668: Properties of each modifier.

Id	Name	SBO
mRNA_P_Eve	mRNA_P_Eve	

#### Product

Table 2669: Properties of each product.

Id	Name	SBO
PROTEIN_P_Eve	PROTEIN_P_Eve	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{684} = P.k.translation \cdot [\text{mRNA\_P\_Eve}] \quad (1480)$$

Table 2670: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.685 Reaction mRNA\_P\_Ficolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Ficolin\_degradation

### Reaction equation



### Reactant

Table 2671: Properties of each reactant.

Id	Name	SBO
mRNA_P_Ficolin	mRNA_P_Ficolin	

### Modifier

Table 2672: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2673: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{685} = P\_mRNA\_deg \cdot [\text{mRNA\_P\_Ficolin}] \quad (1482)$$

Table 2674: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.686 Reaction mRNA\_P\_Ficolin\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Ficolin\_translation

#### Reaction equation



#### Reactant

Table 2675: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2676: Properties of each modifier.

Id	Name	SBO
mRNA_P_Ficolin	mRNA_P_Ficolin	

#### Product

Table 2677: Properties of each product.

Id	Name	SBO
PROTEIN_P_Ficolin	PROTEIN_P_Ficolin	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{686} = P_{k\_translation} \cdot [\text{mRNA\_P\_Ficolin}] \quad (1484)$$

Table 2678: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.687 Reaction mRNA\_P\_FoxA\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxA\_degradation

#### Reaction equation



#### Reactant

Table 2679: Properties of each reactant.

Id	Name	SBO
mRNA_P_FoxA	mRNA_P_FoxA	

#### Modifier

Table 2680: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2681: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{687} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_FoxA}] \quad (1486)$$

Table 2682: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.688 Reaction mRNA\_P\_FoxA\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxA\_translation

#### Reaction equation



#### Reactant

Table 2683: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2684: Properties of each modifier.

Id	Name	SBO
mRNA_P_FoxA	mRNA_P_FoxA	

#### Product

Table 2685: Properties of each product.

Id	Name	SBO
PROTEIN_P_FoxA	PROTEIN_P_FoxA	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{688} = P_{k\_translation} \cdot [\text{mRNA\_P\_FoxA}] \quad (1488)$$

Table 2686: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.689 Reaction mRNA\_P\_FoxB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxB\_degradation

### Reaction equation



### Reactant

Table 2687: Properties of each reactant.

Id	Name	SBO
mRNA_P_FoxB	mRNA_P_FoxB	

### Modifier

Table 2688: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2689: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{689} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_FoxB}] \quad (1490)$$

Table 2690: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.690 Reaction mRNA\_P\_FoxB\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxB\_translation

### Reaction equation



### Reactant

Table 2691: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2692: Properties of each modifier.

Id	Name	SBO
mRNA_P_FoxB	mRNA_P_FoxB	

### Product

Table 2693: Properties of each product.

Id	Name	SBO
PROTEIN_P_FoxB	PROTEIN_P_FoxB	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{690} = P_{k\_translation} \cdot [\text{mRNA\_P\_FoxB}] \quad (1492)$$

Table 2694: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.691 Reaction mRNA\_P\_FoxN23\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxN23\_degradation

### Reaction equation



### Reactant

Table 2695: Properties of each reactant.

Id	Name	SBO
mRNA_P_FoxN23	mRNA_P_FoxN23	

### Modifier

Table 2696: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2697: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{691} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_FoxN23}] \quad (1494)$$

Table 2698: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.692 Reaction mRNA\_P\_FoxN23\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxN23\_translation

### Reaction equation



### Reactant

Table 2699: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2700: Properties of each modifier.

Id	Name	SBO
mRNA_P_FoxN23	mRNA_P_FoxN23	

### Product

Table 2701: Properties of each product.

Id	Name	SBO
PROTEIN_P_FoxN23	PROTEIN_P_FoxN23	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{692} = P.k.translation \cdot [\text{mRNA\_P\_FoxN23}] \quad (1496)$$

Table 2702: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.693 Reaction mRNA\_P\_FoxO\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxO\_degradation

#### Reaction equation



#### Reactant

Table 2703: Properties of each reactant.

Id	Name	SBO
mRNA_P_FoxO	mRNA_P_FoxO	

#### Modifier

Table 2704: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2705: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{693} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_FoxO}] \quad (1498)$$

Table 2706: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.694 Reaction mRNA\_P\_FoxO\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FoxO\_translation

#### Reaction equation



#### Reactant

Table 2707: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2708: Properties of each modifier.

Id	Name	SBO
mRNA_P_FoxO	mRNA_P_FoxO	

#### Product

Table 2709: Properties of each product.

Id	Name	SBO
PROTEIN_P_FoxO	PROTEIN_P_FoxO	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{694} = P_{k\_translation} \cdot [\text{mRNA\_P\_FoxO}] \quad (1500)$$

Table 2710: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.695 Reaction mRNA\_P\_FvMo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FvMo\_degradation

**Reaction equation**



**Reactant**

Table 2711: Properties of each reactant.

Id	Name	SBO
mRNA_P_FvMo	mRNA_P_FvMo	

**Modifier**

Table 2712: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2713: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{695} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_FvMo}] \quad (1502)$$

Table 2714: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.696 Reaction mRNA\_P\_FvMo\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_FvMo\_translation

#### Reaction equation



#### Reactant

Table 2715: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2716: Properties of each modifier.

Id	Name	SBO
mRNA_P_FvMo	mRNA_P_FvMo	

#### Product

Table 2717: Properties of each product.

Id	Name	SBO
PROTEIN_P_FvMo	PROTEIN_P_FvMo	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{696} = P.k\_translation \cdot [\text{mRNA\_P\_FvMo}] \quad (1504)$$

Table 2718: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.697 Reaction mRNA\_P\_GataC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_GataC\_degradation

#### Reaction equation



#### Reactant

Table 2719: Properties of each reactant.

Id	Name	SBO
mRNA_P_GataC	mRNA_P_GataC	

#### Modifier

Table 2720: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2721: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{697} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_GataC}] \quad (1506)$$

Table 2722: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.698 Reaction mRNA\_P\_GataC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_GataC\_translation

#### Reaction equation



#### Reactant

Table 2723: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2724: Properties of each modifier.

Id	Name	SBO
mRNA_P_GataC	mRNA_P_GataC	

#### Product

Table 2725: Properties of each product.

Id	Name	SBO
PROTEIN_P_GataC	PROTEIN_P_GataC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{698} = P\_k\_translation \cdot [\text{mRNA\_P\_GataC}] \quad (1508)$$

Table 2726: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.699 Reaction mRNA\_P\_GataE\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_GataE\_degradation

#### Reaction equation



#### Reactant

Table 2727: Properties of each reactant.

Id	Name	SBO
mRNA_P_GataE	mRNA_P_GataE	

#### Modifier

Table 2728: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2729: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{699} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_GataE}] \quad (1510)$$

Table 2730: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.700 Reaction mRNA\_P\_GataE\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_GataE\_translation

### Reaction equation



### Reactant

Table 2731: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2732: Properties of each modifier.

Id	Name	SBO
mRNA_P_GataE	mRNA_P_GataE	

### Product

Table 2733: Properties of each product.

Id	Name	SBO
PROTEIN_P_GataE	PROTEIN_P_GataE	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{700} = P_{k\_translation} \cdot [\text{mRNA\_P\_GataE}] \quad (1512)$$

Table 2734: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.701 Reaction mRNA\_P\_Gcad\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Gcad\_degradation

### Reaction equation



### Reactant

Table 2735: Properties of each reactant.

Id	Name	SBO
mRNA_P_Gcad	mRNA_P_Gcad	

### Modifier

Table 2736: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2737: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{701} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Gcad}] \quad (1514)$$

Table 2738: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.702 Reaction mRNA\_P\_Gcad\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Gcad\_translation

### Reaction equation



### Reactant

Table 2739: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2740: Properties of each modifier.

Id	Name	SBO
mRNA_P_Gcad	mRNA_P_Gcad	

### Product

Table 2741: Properties of each product.

Id	Name	SBO
PROTEIN_P_Gcad	PROTEIN_P_Gcad	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{702} = P_{k\_translation} \cdot [\text{mRNA\_P\_Gcad}] \quad (1516)$$

Table 2742: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.703 Reaction mRNA\_P\_Gcm\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Gcm\_degradation

#### Reaction equation



#### Reactant

Table 2743: Properties of each reactant.

Id	Name	SBO
mRNA_P_Gcm	mRNA_P_Gcm	

#### Modifier

Table 2744: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2745: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{703} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Gcm}] \quad (1518)$$

Table 2746: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.704 Reaction mRNA\_P\_Gcm\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Gcm\_translation

#### Reaction equation



#### Reactant

Table 2747: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2748: Properties of each modifier.

Id	Name	SBO
mRNA_P_Gcm	mRNA_P_Gcm	

#### Product

Table 2749: Properties of each product.

Id	Name	SBO
PROTEIN_P_Gcm	PROTEIN_P_Gcm	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{704} = P_k_{\text{translation}} \cdot [\text{mRNA\_P\_Gcm}] \quad (1520)$$

Table 2750: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.705 Reaction mRNA\_P\_Gelsolin\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Gelsolin\_degradation

### Reaction equation



### Reactant

Table 2751: Properties of each reactant.

Id	Name	SBO
mRNA_P_Gelsolin	mRNA_P_Gelsolin	

### Modifier

Table 2752: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2753: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{705} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Gelsolin}] \quad (1522)$$

Table 2754: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.706 Reaction mRNA\_P\_Gelsolin\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Gelsolin\_translation

#### Reaction equation



#### Reactant

Table 2755: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2756: Properties of each modifier.

Id	Name	SBO
mRNA_P_Gelsolin	mRNA_P_Gelsolin	

#### Product

Table 2757: Properties of each product.

Id	Name	SBO
PROTEIN_P_Gelsolin	PROTEIN_P_Gelsolin	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{706} = P.k.translation \cdot [\text{mRNA\_P\_Gelsolin}] \quad (1524)$$

Table 2758: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.707 Reaction mRNA\_P\_HesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_HesC\_degradation

#### Reaction equation



#### Reactant

Table 2759: Properties of each reactant.

Id	Name	SBO
mRNA_P_HesC	mRNA_P_HesC	

#### Modifier

Table 2760: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2761: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{707} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_HesC}] \quad (1526)$$

Table 2762: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.708 Reaction mRNA\_P\_HesC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_HesC\_translation

#### Reaction equation



#### Reactant

Table 2763: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2764: Properties of each modifier.

Id	Name	SBO
mRNA_P_HesC	mRNA_P_HesC	

#### Product

Table 2765: Properties of each product.

Id	Name	SBO
PROTEIN_P_HesC	PROTEIN_P_HesC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$\nu_{708} = P_{k\_translation} \cdot [\text{mRNA\_P\_HesC}] \quad (1528)$$

Table 2766: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.709 Reaction mRNA\_P\_Hex\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Hex\_degradation

**Reaction equation**



**Reactant**

Table 2767: Properties of each reactant.

Id	Name	SBO
mRNA_P_Hex	mRNA_P_Hex	

**Modifier**

Table 2768: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2769: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{709} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Hex}] \quad (1530)$$

Table 2770: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.710 Reaction mRNA\_P\_Hex\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Hex\_translation

#### Reaction equation



#### Reactant

Table 2771: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2772: Properties of each modifier.

Id	Name	SBO
mRNA_P_Hex	mRNA_P_Hex	

#### Product

Table 2773: Properties of each product.

Id	Name	SBO
PROTEIN_P_Hex	PROTEIN_P_Hex	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{710} = P_{k\_translation} \cdot [\text{mRNA\_P\_Hex}] \quad (1532)$$

Table 2774: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.7.11 Reaction mRNA\_P\_Hnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Hnf6\_degradation

#### Reaction equation



#### Reactant

Table 2775: Properties of each reactant.

Id	Name	SBO
mRNA_P_Hnf6	mRNA_P_Hnf6	

#### Modifier

Table 2776: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2777: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{711} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Hnf6}] \quad (1534)$$

Table 2778: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.712 Reaction mRNA\_P\_Hnf6\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Hnf6\_translation

#### Reaction equation



#### Reactant

Table 2779: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2780: Properties of each modifier.

Id	Name	SBO
mRNA_P_Hnf6	mRNA_P_Hnf6	

#### Product

Table 2781: Properties of each product.

Id	Name	SBO
PROTEIN_P_Hnf6	PROTEIN_P_Hnf6	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{712} = P_{k\_translation} \cdot [\text{mRNA\_P\_Hnf6}] \quad (1536)$$

Table 2782: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.713 Reaction mRNA\_P\_Hox\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Hox\_degradation

**Reaction equation**



**Reactant**

Table 2783: Properties of each reactant.

Id	Name	SBO
mRNA_P_Hox	mRNA_P_Hox	

**Modifier**

Table 2784: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2785: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{713} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Hox}] \quad (1538)$$

Table 2786: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.714 Reaction mRNA\_P\_Hox\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Hox\_translation

#### Reaction equation



#### Reactant

Table 2787: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2788: Properties of each modifier.

Id	Name	SBO
mRNA_P_Hox	mRNA_P_Hox	

#### Product

Table 2789: Properties of each product.

Id	Name	SBO
PROTEIN_P_Hox	PROTEIN_P_Hox	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{714} = P_{k\_translation} \cdot [\text{mRNA\_P\_Hox}] \quad (1540)$$

Table 2790: Properties of each parameter.

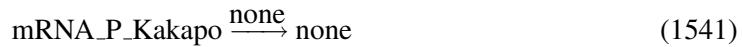
Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.715 Reaction mRNA\_P\_Kakapo\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Kakapo\_degradation

**Reaction equation**



**Reactant**

Table 2791: Properties of each reactant.

Id	Name	SBO
mRNA_P_Kakapo	mRNA_P_Kakapo	

**Modifier**

Table 2792: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2793: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{715} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Kakapo}] \quad (1542)$$

Table 2794: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.716 Reaction mRNA\_P\_Kakapo\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Kakapo\_translation

#### Reaction equation



#### Reactant

Table 2795: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2796: Properties of each modifier.

Id	Name	SBO
mRNA_P_Kakapo	mRNA_P_Kakapo	

#### Product

Table 2797: Properties of each product.

Id	Name	SBO
PROTEIN_P_Kakapo	PROTEIN_P_Kakapo	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{716} = P\_k\_translation \cdot [\text{mRNA\_P\_Kakapo}] \quad (1544)$$

Table 2798: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.717 Reaction mRNA\_P\_L1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_L1\_degradation

#### Reaction equation



#### Reactant

Table 2799: Properties of each reactant.

Id	Name	SBO
mRNA_P_L1	mRNA_P_L1	

#### Modifier

Table 2800: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2801: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{717} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_L1}] \quad (1546)$$

Table 2802: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.718 Reaction mRNA\_P\_L1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_L1\_translation

#### Reaction equation



#### Reactant

Table 2803: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2804: Properties of each modifier.

Id	Name	SBO
mRNA_P_L1	mRNA_P_L1	

#### Product

Table 2805: Properties of each product.

Id	Name	SBO
PROTEIN_P_L1	PROTEIN_P_L1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{718} = P_{k\_translation} \cdot [\text{mRNA\_P\_L1}] \quad (1548)$$

Table 2806: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.719 Reaction mRNA\_P\_Lim\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Lim\_degradation

**Reaction equation**



**Reactant**

Table 2807: Properties of each reactant.

Id	Name	SBO
mRNA_P_Lim	mRNA_P_Lim	

**Modifier**

Table 2808: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2809: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{719} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Lim}] \quad (1550)$$

Table 2810: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.720 Reaction mRNA\_P\_Lim\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Lim\_translation

### Reaction equation



### Reactant

Table 2811: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2812: Properties of each modifier.

Id	Name	SBO
mRNA_P_Lim	mRNA_P_Lim	

### Product

Table 2813: Properties of each product.

Id	Name	SBO
PROTEIN_P_Lim	PROTEIN_P_Lim	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{720} = P_{k\_translation} \cdot [\text{mRNA\_P\_Lim}] \quad (1552)$$

Table 2814: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.721 Reaction mRNA\_P\_Msp130\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Msp130\_degradation

#### Reaction equation



#### Reactant

Table 2815: Properties of each reactant.

Id	Name	SBO
mRNA_P_Msp130	mRNA_P_Msp130	

#### Modifier

Table 2816: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2817: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{721} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Msp130}] \quad (1554)$$

Table 2818: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.722 Reaction mRNA\_P\_Msp130\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Msp130\_translation

#### Reaction equation



#### Reactant

Table 2819: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2820: Properties of each modifier.

Id	Name	SBO
mRNA_P_Msp130	mRNA_P_Msp130	

#### Product

Table 2821: Properties of each product.

Id	Name	SBO
PROTEIN_P_Msp130	PROTEIN_P_Msp130	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{722} = P.k\_translation \cdot [\text{mRNA\_P\_Msp130}] \quad (1556)$$

Table 2822: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.723 Reaction mRNA\_P\_MspL\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_MspL\_degradation

#### Reaction equation



#### Reactant

Table 2823: Properties of each reactant.

Id	Name	SBO
mRNA_P_MspL	mRNA_P_MspL	

#### Modifier

Table 2824: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2825: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{723} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_MspL}] \quad (1558)$$

Table 2826: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.724 Reaction mRNA\_P\_MspL\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_MspL\_translation

#### Reaction equation



#### Reactant

Table 2827: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2828: Properties of each modifier.

Id	Name	SBO
mRNA_P_MspL	mRNA_P_MspL	

#### Product

Table 2829: Properties of each product.

Id	Name	SBO
PROTEIN_P_MspL	PROTEIN_P_MspL	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{724} = P.k\_translation \cdot [\text{mRNA\_P\_MspL}] \quad (1560)$$

Table 2830: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.725 Reaction mRNA\_P\_Not\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Not\_degradation

**Reaction equation**



**Reactant**

Table 2831: Properties of each reactant.

Id	Name	SBO
mRNA_P_Not	mRNA_P_Not	

**Modifier**

Table 2832: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2833: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{725} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Not}] \quad (1562)$$

Table 2834: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.726 Reaction mRNA\_P\_Not\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Not\_translation

#### Reaction equation



#### Reactant

Table 2835: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2836: Properties of each modifier.

Id	Name	SBO
mRNA_P_Not	mRNA_P_Not	

#### Product

Table 2837: Properties of each product.

Id	Name	SBO
PROTEIN_P_Not	PROTEIN_P_Not	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{726} = P_{k\_translation} \cdot [\text{mRNA\_P\_Not}] \quad (1564)$$

Table 2838: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.727 Reaction mRNA\_P\_Nrl\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Nrl\_degradation

#### Reaction equation



#### Reactant

Table 2839: Properties of each reactant.

Id	Name	SBO
mRNA_P_Nrl	mRNA_P_Nrl	

#### Modifier

Table 2840: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2841: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{727} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Nrl}] \quad (1566)$$

Table 2842: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.728 Reaction mRNA\_P\_Nrl\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Nrl\_translation

#### Reaction equation



#### Reactant

Table 2843: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2844: Properties of each modifier.

Id	Name	SBO
mRNA_P_Nrl	mRNA_P_Nrl	

#### Product

Table 2845: Properties of each product.

Id	Name	SBO
PROTEIN_P_Nrl	PROTEIN_P_Nrl	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{728} = P_{k\_translation} \cdot [\text{mRNA\_P\_Nrl}] \quad (1568)$$

Table 2846: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.729 Reaction mRNA\_P\_OrCt\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_OrCt\_degradation

**Reaction equation**



**Reactant**

Table 2847: Properties of each reactant.

Id	Name	SBO
mRNA_P_OrCt	mRNA_P_OrCt	

**Modifier**

Table 2848: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2849: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{729} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_OrCt}] \quad (1570)$$

Table 2850: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.730 Reaction mRNA\_P\_OrCt\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_OrCt\_translation

#### Reaction equation



#### Reactant

Table 2851: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2852: Properties of each modifier.

Id	Name	SBO
mRNA_P_OrCt	mRNA_P_OrCt	

#### Product

Table 2853: Properties of each product.

Id	Name	SBO
PROTEIN_P_OrCt	PROTEIN_P_OrCt	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{730} = P_k\_translation \cdot [\text{mRNA\_P\_OrCt}] \quad (1572)$$

Table 2854: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.731 Reaction mRNA\_P\_Otx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Otx\_degradation

**Reaction equation**



**Reactant**

Table 2855: Properties of each reactant.

Id	Name	SBO
mRNA_P_Otx	mRNA_P_Otx	

**Modifier**

Table 2856: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2857: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{731} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Otx}] \quad (1574)$$

Table 2858: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.732 Reaction mRNA\_P\_Otx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Otx\_translation

#### Reaction equation



#### Reactant

Table 2859: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2860: Properties of each modifier.

Id	Name	SBO
mRNA_P_Otx	mRNA_P_Otx	

#### Product

Table 2861: Properties of each product.

Id	Name	SBO
PROTEIN_P_Otx	PROTEIN_P_Otx	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{732} = P_{k\_translation} \cdot [\text{mRNA\_P\_Otx}] \quad (1576)$$

Table 2862: Properties of each parameter.

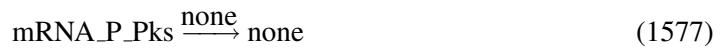
Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.733 Reaction mRNA\_P\_Pks\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Pks\_degradation

#### Reaction equation



#### Reactant

Table 2863: Properties of each reactant.

Id	Name	SBO
mRNA_P_Pks	mRNA_P_Pks	

#### Modifier

Table 2864: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2865: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{733} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Pks}] \quad (1578)$$

Table 2866: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.734 Reaction mRNA\_P\_Pks\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Pks\_translation

#### Reaction equation



#### Reactant

Table 2867: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2868: Properties of each modifier.

Id	Name	SBO
mRNA_P_Pks	mRNA_P_Pks	

#### Product

Table 2869: Properties of each product.

Id	Name	SBO
PROTEIN_P_Pks	PROTEIN_P_Pks	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{734} = P_{k\_translation} \cdot [\text{mRNA\_P\_Pks}] \quad (1580)$$

Table 2870: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.735 Reaction mRNA\_P\_Pmar1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Pmar1\_degradation

#### Reaction equation



#### Reactant

Table 2871: Properties of each reactant.

Id	Name	SBO
mRNA_P_Pmar1	mRNA_P_Pmar1	

#### Modifier

Table 2872: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2873: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{735} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Pmar1}] \quad (1582)$$

Table 2874: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.736 Reaction mRNA\_P\_Pmar1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Pmar1\_translation

#### Reaction equation



#### Reactant

Table 2875: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2876: Properties of each modifier.

Id	Name	SBO
mRNA_P_Pmar1	mRNA_P_Pmar1	

#### Product

Table 2877: Properties of each product.

Id	Name	SBO
PROTEIN_P_Pmar1	PROTEIN_P_Pmar1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{736} = P\_k\_translation \cdot [\text{mRNA\_P\_Pmar1}] \quad (1584)$$

Table 2878: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.737 Reaction mRNA\_P\_Sm27\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Sm27\_degradation

#### Reaction equation



#### Reactant

Table 2879: Properties of each reactant.

Id	Name	SBO
mRNA_P_Sm27	mRNA_P_Sm27	

#### Modifier

Table 2880: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2881: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{737} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Sm27}] \quad (1586)$$

Table 2882: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.738 Reaction mRNA\_P\_Sm27\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Sm27\_translation

#### Reaction equation



#### Reactant

Table 2883: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2884: Properties of each modifier.

Id	Name	SBO
mRNA_P_Sm27	mRNA_P_Sm27	

#### Product

Table 2885: Properties of each product.

Id	Name	SBO
PROTEIN_P_Sm27	PROTEIN_P_Sm27	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{738} = P_{k\_translation} \cdot [\text{mRNA\_P\_Sm27}] \quad (1588)$$

Table 2886: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.739 Reaction mRNA\_P\_Sm30\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Sm30\_degradation

#### Reaction equation



#### Reactant

Table 2887: Properties of each reactant.

Id	Name	SBO
mRNA_P_Sm30	mRNA_P_Sm30	

#### Modifier

Table 2888: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2889: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{739} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Sm30}] \quad (1590)$$

Table 2890: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.740 Reaction mRNA\_P\_Sm30\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Sm30\_translation

#### Reaction equation



#### Reactant

Table 2891: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2892: Properties of each modifier.

Id	Name	SBO
mRNA_P_Sm30	mRNA_P_Sm30	

#### Product

Table 2893: Properties of each product.

Id	Name	SBO
PROTEIN_P_Sm30	PROTEIN_P_Sm30	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{740} = P.k\_translation \cdot [\text{mRNA\_P\_Sm30}] \quad (1592)$$

Table 2894: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.741 Reaction mRNA\_P\_Sm50\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Sm50\_degradation

#### Reaction equation



#### Reactant

Table 2895: Properties of each reactant.

Id	Name	SBO
mRNA_P_Sm50	mRNA_P_Sm50	

#### Modifier

Table 2896: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2897: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{741} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Sm50}] \quad (1594)$$

Table 2898: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.742 Reaction mRNA\_P\_Sm50\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Sm50\_translation

#### Reaction equation



#### Reactant

Table 2899: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2900: Properties of each modifier.

Id	Name	SBO
mRNA_P_Sm50	mRNA_P_Sm50	

#### Product

Table 2901: Properties of each product.

Id	Name	SBO
PROTEIN_P_Sm50	PROTEIN_P_Sm50	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{742} = P.k\_translation \cdot [\text{mRNA\_P\_Sm50}] \quad (1596)$$

Table 2902: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.743 Reaction mRNA\_P\_Snail\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Snail\_degradation

**Reaction equation**



**Reactant**

Table 2903: Properties of each reactant.

Id	Name	SBO
mRNA_P_Snail	mRNA_P_Snail	

**Modifier**

Table 2904: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2905: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{743} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Snail}] \quad (1598)$$

Table 2906: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.744 Reaction mRNA\_P\_Snail\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Snail\_translation

#### Reaction equation



#### Reactant

Table 2907: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2908: Properties of each modifier.

Id	Name	SBO
mRNA_P_Snail	mRNA_P_Snail	

#### Product

Table 2909: Properties of each product.

Id	Name	SBO
PROTEIN_P_Snail	PROTEIN_P_Snail	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{744} = P_{k\_translation} \cdot [\text{mRNA\_P\_Snail}] \quad (1600)$$

Table 2910: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.745 Reaction mRNA\_P\_SoxB1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_SoxB1\_degradation

#### Reaction equation



#### Reactant

Table 2911: Properties of each reactant.

Id	Name	SBO
mRNA_P_SoxB1	mRNA_P_SoxB1	

#### Modifier

Table 2912: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2913: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{745} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_SoxB1}] \quad (1602)$$

Table 2914: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.746 Reaction mRNA\_P\_SoxB1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_SoxB1\_translation

#### Reaction equation



#### Reactant

Table 2915: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2916: Properties of each modifier.

Id	Name	SBO
mRNA_P_SoxB1	mRNA_P_SoxB1	

#### Product

Table 2917: Properties of each product.

Id	Name	SBO
PROTEIN_P_SoxB1	PROTEIN_P_SoxB1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{746} = P_{k\_translation} \cdot [\text{mRNA\_P\_SoxB1}] \quad (1604)$$

Table 2918: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.747 Reaction mRNA\_P\_SoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_SoxC\_degradation

#### Reaction equation



#### Reactant

Table 2919: Properties of each reactant.

Id	Name	SBO
mRNA_P_SoxC	mRNA_P_SoxC	

#### Modifier

Table 2920: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2921: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{747} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_SoxC}] \quad (1606)$$

Table 2922: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.748 Reaction mRNA\_P\_SoxC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_SoxC\_translation

#### Reaction equation



#### Reactant

Table 2923: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2924: Properties of each modifier.

Id	Name	SBO
mRNA_P_SoxC	mRNA_P_SoxC	

#### Product

Table 2925: Properties of each product.

Id	Name	SBO
PROTEIN_P_SoxC	PROTEIN_P_SoxC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{748} = P_{k\_translation} \cdot [\text{mRNA\_P\_SoxC}] \quad (1608)$$

Table 2926: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.749 Reaction mRNA\_P\_SuTx\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_SuTx\_degradation

### Reaction equation



### Reactant

Table 2927: Properties of each reactant.

Id	Name	SBO
mRNA_P_SuTx	mRNA_P_SuTx	

### Modifier

Table 2928: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2929: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{749} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_SuTx}] \quad (1610)$$

Table 2930: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.750 Reaction mRNA\_P\_SuTx\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_SuTx\_translation

### Reaction equation



### Reactant

Table 2931: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2932: Properties of each modifier.

Id	Name	SBO
mRNA_P_SuTx	mRNA_P_SuTx	

### Product

Table 2933: Properties of each product.

Id	Name	SBO
PROTEIN_P_SuTx	PROTEIN_P_SuTx	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{750} = P_{k\_translation} \cdot [\text{mRNA\_P\_SuTx}] \quad (1612)$$

Table 2934: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 7.751 Reaction mRNA\_P\_TBr\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_TBr\_degradation

### Reaction equation



### Reactant

Table 2935: Properties of each reactant.

Id	Name	SBO
mRNA_P_TBr	mRNA_P_TBr	

### Modifier

Table 2936: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2937: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{751} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_TBr}] \quad (1614)$$

Table 2938: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.752 Reaction mRNA\_P\_TBr\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_TBr\_translation

### Reaction equation



### Reactant

Table 2939: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2940: Properties of each modifier.

Id	Name	SBO
mRNA_P_TBr	mRNA_P_TBr	

### Product

Table 2941: Properties of each product.

Id	Name	SBO
PROTEIN_P_TBr	PROTEIN_P_TBr	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{752} = P\_k\_translation \cdot [\text{mRNA\_P\_TBr}] \quad (1616)$$

Table 2942: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.753 Reaction mRNA\_P\_Tel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Tel\_degradation

#### Reaction equation



#### Reactant

Table 2943: Properties of each reactant.

Id	Name	SBO
mRNA_P_Tel	mRNA_P_Tel	

#### Modifier

Table 2944: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2945: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{753} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Tel}] \quad (1618)$$

Table 2946: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.754 Reaction mRNA\_P\_Tel\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Tel\_translation

#### Reaction equation



#### Reactant

Table 2947: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2948: Properties of each modifier.

Id	Name	SBO
mRNA_P_Tel	mRNA_P_Tel	

#### Product

Table 2949: Properties of each product.

Id	Name	SBO
PROTEIN_P_Tel	PROTEIN_P_Tel	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{754} = P_{k\_translation} \cdot [\text{mRNA\_P\_Tel}] \quad (1620)$$

Table 2950: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.755 Reaction mRNA\_P\_Tgif\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Tgif\_degradation

**Reaction equation**



**Reactant**

Table 2951: Properties of each reactant.

Id	Name	SBO
mRNA_P_Tgif	mRNA_P_Tgif	

**Modifier**

Table 2952: Properties of each modifier.

Id	Name	SBO
none	none	

**Product**

Table 2953: Properties of each product.

Id	Name	SBO
none	none	

**Kinetic Law**

**Derived unit** contains undeclared units

$$v_{755} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Tgif}] \quad (1622)$$

Table 2954: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.756 Reaction mRNA\_P\_Tgif\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Tgif\_translation

#### Reaction equation



#### Reactant

Table 2955: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2956: Properties of each modifier.

Id	Name	SBO
mRNA_P_Tgif	mRNA_P_Tgif	

#### Product

Table 2957: Properties of each product.

Id	Name	SBO
PROTEIN_P_Tgif	PROTEIN_P_Tgif	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{756} = P_{k\_translation} \cdot [\text{mRNA\_P\_Tgif}] \quad (1624)$$

Table 2958: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.757 Reaction mRNA\_P\_UbiqAlx1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqAlx1\_degradation

#### Reaction equation



#### Reactant

Table 2959: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqAlx1	mRNA_P_UbiqAlx1	

#### Modifier

Table 2960: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2961: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{757} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqAlx1}] \quad (1626)$$

Table 2962: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.758 Reaction mRNA\_P\_UbiqAlx1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqAlx1\_translation

#### Reaction equation



#### Reactant

Table 2963: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2964: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqAlx1	mRNA_P_UbiqAlx1	

#### Product

Table 2965: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqAlx1	PROTEIN_P_UbiqAlx1	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{758} = P_{k\_translation} \cdot [\text{mRNA\_P\_UbiqAlx1}] \quad (1628)$$

Table 2966: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.759 Reaction mRNA\_P\_UbiqES\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqES\_degradation

### Reaction equation



### Reactant

Table 2967: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqES	mRNA_P_UbiqES	

### Modifier

Table 2968: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2969: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{759} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqES}] \quad (1630)$$

Table 2970: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.760 Reaction mRNA\_P\_UbiqES\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqES.translation

### Reaction equation



### Reactant

Table 2971: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2972: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqES	mRNA_P_UbiqES	

### Product

Table 2973: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqES	PROTEIN_P_UbiqES	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{760} = P\_k\_translation \cdot [mRNA\_P\_UbiqES] \quad (1632)$$

Table 2974: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.761 Reaction mRNA\_P\_UbiqEts1\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqEts1\_degradation

### Reaction equation



### Reactant

Table 2975: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqEts1	mRNA_P_UbiqEts1	

### Modifier

Table 2976: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2977: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{761} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqEts1}] \quad (1634)$$

Table 2978: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.762 Reaction mRNA\_P\_UbiqEts1\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqEts1\_translation

### Reaction equation



### Reactant

Table 2979: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 2980: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqEts1	mRNA_P_UbiqEts1	

### Product

Table 2981: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqEts1	PROTEIN_P_UbiqEts1	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{762} = P_{k\_translation} \cdot [\text{mRNA\_P\_UbiqEts1}] \quad (1636)$$

Table 2982: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.763 Reaction mRNA\_P\_UbiqHesC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqHesC\_degradation

#### Reaction equation



#### Reactant

Table 2983: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqHesC	mRNA_P_UbiqHesC	

#### Modifier

Table 2984: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 2985: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{763} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqHesC}] \quad (1638)$$

Table 2986: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.764 Reaction mRNA\_P\_UbiqHesC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqHesC\_translation

#### Reaction equation



#### Reactant

Table 2987: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2988: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqHesC	mRNA_P_UbiqHesC	

#### Product

Table 2989: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqHesC	PROTEIN_P_UbiqHesC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{764} = P.k.translation \cdot [\text{mRNA\_P\_UbiqHesC}] \quad (1640)$$

Table 2990: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.765 Reaction mRNA\_P\_UbiqHnf6\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqHnf6\_degradation

### Reaction equation



### Reactant

Table 2991: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqHnf6	mRNA_P_UbiqHnf6	

### Modifier

Table 2992: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 2993: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{765} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqHnf6}] \quad (1642)$$

Table 2994: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.766 Reaction mRNA\_P\_UbiqHnf6\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqHnf6\_translation

#### Reaction equation



#### Reactant

Table 2995: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 2996: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqHnf6	mRNA_P_UbiqHnf6	

#### Product

Table 2997: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqHnf6	PROTEIN_P_UbiqHnf6	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{766} = P_{k\_translation} \cdot [\text{mRNA\_P\_UbiqHnf6}] \quad (1644)$$

Table 2998: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.767 Reaction mRNA\_P\_UbiqSoxC\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqSoxC\_degradation

### Reaction equation



### Reactant

Table 2999: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqSoxC	mRNA_P_UbiqSoxC	

### Modifier

Table 3000: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 3001: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{767} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqSoxC}] \quad (1646)$$

Table 3002: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.768 Reaction mRNA\_P\_UbiqSoxC\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqSoxC\_translation

#### Reaction equation



#### Reactant

Table 3003: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 3004: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqSoxC	mRNA_P_UbiqSoxC	

#### Product

Table 3005: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqSoxC	PROTEIN_P_UbiqSoxC	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{768} = P.k.translation \cdot [\text{mRNA\_P\_UbiqSoxC}] \quad (1648)$$

Table 3006: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.769 Reaction mRNA\_P\_UbiqTel\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqTel\_degradation

### Reaction equation



### Reactant

Table 3007: Properties of each reactant.

Id	Name	SBO
mRNA_P_UbiqTel	mRNA_P_UbiqTel	

### Modifier

Table 3008: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 3009: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{769} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_UbiqTel}] \quad (1650)$$

Table 3010: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.770 Reaction mRNA\_P\_UbiqTel\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_UbiqTel\_translation

### Reaction equation



### Reactant

Table 3011: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 3012: Properties of each modifier.

Id	Name	SBO
mRNA_P_UbiqTel	mRNA_P_UbiqTel	

### Product

Table 3013: Properties of each product.

Id	Name	SBO
PROTEIN_P_UbiqTel	PROTEIN_P_UbiqTel	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{770} = P.k.translation \cdot [\text{mRNA\_P\_UbiqTel}] \quad (1652)$$

Table 3014: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

### 7.771 Reaction mRNA\_P\_VEGFR\_degradation\_0

This is an irreversible reaction of one reactant forming one product.

**Name** mRNA\_P\_VEGFR\_degradation

#### Reaction equation



#### Reactant

Table 3015: Properties of each reactant.

Id	Name	SBO
mRNA_P_VEGFR	mRNA_P_VEGFR	

#### Product

Table 3016: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{771} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_VEGFR}] \quad (1654)$$

Table 3017: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.772 Reaction mRNA\_P\_VEGFR\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_VEGFR\_translation

### Reaction equation



### Reactant

Table 3018: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 3019: Properties of each modifier.

Id	Name	SBO
mRNA_P_VEGFR	mRNA_P_VEGFR	

### Product

Table 3020: Properties of each product.

Id	Name	SBO
PROTEIN_P_VEGFR	PROTEIN_P_VEGFR	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{772} = P\_k\_translation \cdot [\text{mRNA\_P\_VEGFR}] \quad (1656)$$

Table 3021: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

### 7.773 Reaction mRNA\_P\_Wnt8\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Wnt8\_degradation

#### Reaction equation



#### Reactant

Table 3022: Properties of each reactant.

Id	Name	SBO
mRNA_P_Wnt8	mRNA_P_Wnt8	

#### Modifier

Table 3023: Properties of each modifier.

Id	Name	SBO
none	none	

#### Product

Table 3024: Properties of each product.

Id	Name	SBO
none	none	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{773} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_Wnt8}] \quad (1658)$$

Table 3025: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.774 Reaction mRNA\_P\_Wnt8\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_Wnt8\_translation

#### Reaction equation



#### Reactant

Table 3026: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 3027: Properties of each modifier.

Id	Name	SBO
mRNA_P_Wnt8	mRNA_P_Wnt8	

#### Product

Table 3028: Properties of each product.

Id	Name	SBO
PROTEIN_P_Wnt8	PROTEIN_P_Wnt8	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{774} = P_{k\_translation} \cdot [\text{mRNA\_P\_Wnt8}] \quad (1660)$$

Table 3029: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.775 Reaction mRNA\_P\_cB\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_cB\_degradation

### Reaction equation



### Reactant

Table 3030: Properties of each reactant.

Id	Name	SBO
mRNA_P_cB	mRNA_P_cB	

### Modifier

Table 3031: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 3032: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{775} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_cB}] \quad (1662)$$

Table 3033: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

## 7.776 Reaction mRNA\_P\_cB\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_cB\_translation

### Reaction equation



### Reactant

Table 3034: Properties of each reactant.

Id	Name	SBO
none	none	

### Modifier

Table 3035: Properties of each modifier.

Id	Name	SBO
mRNA_P_cB	mRNA_P_cB	

### Product

Table 3036: Properties of each product.

Id	Name	SBO
PROTEIN_P_cB	PROTEIN_P_cB	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{776} = P_k\_translation \cdot [\text{mRNA\_P\_cB}] \quad (1664)$$

Table 3037: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k-_translation			2.0		<input checked="" type="checkbox"/>

## 7.777 Reaction mRNA\_P\_z13\_degradation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_z13\_degradation

### Reaction equation



### Reactant

Table 3038: Properties of each reactant.

Id	Name	SBO
mRNA_P_z13	mRNA_P_z13	

### Modifier

Table 3039: Properties of each modifier.

Id	Name	SBO
none	none	

### Product

Table 3040: Properties of each product.

Id	Name	SBO
none	none	

### Kinetic Law

**Derived unit** contains undeclared units

$$v_{777} = P_{\text{mRNA\_deg}} \cdot [\text{mRNA\_P\_z13}] \quad (1666)$$

Table 3041: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_mRNA_deg			0.119		<input checked="" type="checkbox"/>

### 7.778 Reaction mRNA\_P\_z13\_translation\_0

This is an irreversible reaction of one reactant forming one product influenced by one modifier.

**Name** mRNA\_P\_z13\_translation

#### Reaction equation



#### Reactant

Table 3042: Properties of each reactant.

Id	Name	SBO
none	none	

#### Modifier

Table 3043: Properties of each modifier.

Id	Name	SBO
mRNA_P_z13	mRNA_P_z13	

#### Product

Table 3044: Properties of each product.

Id	Name	SBO
PROTEIN_P_z13	PROTEIN_P_z13	

#### Kinetic Law

**Derived unit** contains undeclared units

$$v_{778} = P_{k\_translation} \cdot [\text{mRNA\_P\_z13}] \quad (1668)$$

Table 3045: Properties of each parameter.

Id	Name	SBO	Value	Unit	Constant
P_k- _translation			2.0		<input checked="" type="checkbox"/>

## 8 Derived Rate Equations

When interpreted as an ordinary differential equation framework, this model implies the following set of equations for the rates of change of each species.

Identifiers for kinetic laws highlighted in gray cannot be verified to evaluate to units of SBML substance per time. As a result, some SBML interpreters may not be able to verify the consistency of the units on quantities in the model. Please check if

- parameters without an unit definition are involved or
- volume correction is necessary because the hasOnlySubstanceUnits flag may be set to false and spacialDimensions>0 for certain species.

### 8.1 Species GENE\_E\_Alx1

**Name** GENE\_E\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in `GENE_E_Alx1_transcription_0`), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Alx1} = 0 \quad (1669)$$

### 8.2 Species GENE\_E\_Apobec

**Name** GENE\_E\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in `GENE_E_Apobec_transcription_0`), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Apobec} = 0 \quad (1670)$$

### 8.3 Species GENE\_E\_Blimp1

**Name** GENE\_E\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Blimp1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Blimp1} = 0 \quad (1671)$$

### 8.4 Species GENE\_E\_Bra

**Name** GENE\_E\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Bra\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Bra} = 0 \quad (1672)$$

### 8.5 Species GENE\_E\_Brn

**Name** GENE\_E\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Brn\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Brn} = 0 \quad (1673)$$

### 8.6 Species GENE\_E\_CAPK

**Name** GENE\_E\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

$$\frac{d}{dt} \text{GENE\_E\_CAPK} = 0 \quad (1674)$$

## 8.7 Species GENE\_E\_CyP

**Name** GENE\_E\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_CyP\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_CyP} = 0 \quad (1675)$$

## 8.8 Species GENE\_E\_Delta

**Name** GENE\_E\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Delta\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Delta} = 0 \quad (1676)$$

## 8.9 Species GENE\_E\_Dpt

**Name** GENE\_E\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Dpt\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Dpt} = 0 \quad (1677)$$

## 8.10 Species GENE\_E\_Dri

**Name** GENE\_E\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Dri\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Dri} = 0 \quad (1678)$$

## 8.11 Species GENE\_E\_ES

**Name** GENE\_E\_ES

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_ES\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_ES} = 0 \quad (1679)$$

## 8.12 Species GENE\_E\_Endo16

**Name** GENE\_E\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Endo16\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Endo16} = 0 \quad (1680)$$

## 8.13 Species GENE\_E\_Erg

**Name** GENE\_E\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Erg\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Erg} = 0 \quad (1681)$$

## 8.14 Species GENE\_E\_Ets1

**Name** GENE\_E\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Ets1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Ets1} = 0 \quad (1682)$$

## 8.15 Species GENE\_E\_Eve

**Name** GENE\_E\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Eve\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Eve} = 0 \quad (1683)$$

## 8.16 Species GENE\_E\_Ficolin

**Name** GENE\_E\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Ficolin\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Ficolin} = 0 \quad (1684)$$

## 8.17 Species GENE\_E\_FoxA

**Name** GENE\_E\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_FoxA\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_FoxA} = 0 \quad (1685)$$

## 8.18 Species GENE\_E\_FoxB

**Name** GENE\_E\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_FoxB\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_FoxB} = 0 \quad (1686)$$

## 8.19 Species GENE\_E\_FoxN23

**Name** GENE\_E\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_FoxN23\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_FoxN23} = 0 \quad (1687)$$

## 8.20 Species GENE\_E\_FoxO

**Name** GENE\_E\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_FoxO\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_FoxO} = 0 \quad (1688)$$

## 8.21 Species GENE\_E\_FvMo

**Name** GENE\_E\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_FvMo\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_FvMo} = 0 \quad (1689)$$

## 8.22 Species GENE\_E\_GataC

**Name** GENE\_E\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_GataC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_GataC} = 0 \quad (1690)$$

## 8.23 Species GENE\_E\_GataE

**Name** GENE\_E\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_GataE\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_GataE} = 0 \quad (1691)$$

## 8.24 Species GENE\_E\_Gcad

**Name** GENE\_E\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Gcad\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Gcad} = 0 \quad (1692)$$

## 8.25 Species GENE\_E\_Gcm

**Name** GENE\_E\_Gcm

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Gcm\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Gcm} = 0 \quad (1693)$$

## 8.26 Species GENE\_E\_Gelsolin

**Name** GENE\_E\_Gelsolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Gelsolin\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Gelsolin} = 0 \quad (1694)$$

## 8.27 Species GENE\_E\_HesC

**Name** GENE\_E\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_HesC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_HesC} = 0 \quad (1695)$$

## 8.28 Species GENE\_E\_Hex

**Name** GENE\_E\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Hex\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Hex} = 0 \quad (1696)$$

## 8.29 Species GENE\_E\_Hnf6

**Name** GENE\_E\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Hnf6\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Hnf6} = 0 \quad (1697)$$

## 8.30 Species GENE\_E\_Hox

**Name** GENE\_E\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Hox\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Hox} = 0 \quad (1698)$$

### 8.31 Species GENE\_E\_Kakapo

**Name** GENE\_E\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Kakapo\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Kakapo} = 0 \quad (1699)$$

### 8.32 Species GENE\_E\_Lim

**Name** GENE\_E\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Lim\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Lim} = 0 \quad (1700)$$

### 8.33 Species GENE\_E\_Msp130

**Name** GENE\_E\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Msp130\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Msp130} = 0 \quad (1701)$$

### 8.34 Species GENE\_E\_MspL

**Name** GENE\_E\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_MspL\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_MspL} = 0 \quad (1702)$$

### 8.35 Species GENE\_E\_Not

**Name** GENE\_E\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Not\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Not} = 0 \quad (1703)$$

### 8.36 Species GENE\_E\_Nrl

**Name** GENE\_E\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Nrl\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Nrl} = 0 \quad (1704)$$

### 8.37 Species GENE\_E\_OrCt

**Name** GENE\_E\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_OrCt\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_OrCt} = 0 \quad (1705)$$

### 8.38 Species GENE\_E\_Otx

**Name** GENE\_E\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Otx\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Otx} = 0 \quad (1706)$$

### 8.39 Species GENE\_E\_Pks

**Name** GENE\_E\_Pks

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Pks\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Pks} = 0 \quad (1707)$$

### 8.40 Species GENE\_E\_Pmar1

**Name** GENE\_E\_Pmar1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Pmar1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Pmar1} = 0 \quad (1708)$$

### 8.41 Species GENE\_E\_Sm27

**Name** GENE\_E\_Sm27

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Sm27\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Sm27} = 0 \quad (1709)$$

### 8.42 Species GENE\_E\_Sm30

**Name** GENE\_E\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Sm30\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Sm30} = 0 \quad (1710)$$

## 8.43 Species GENE\_E\_Sm50

**Name** GENE\_E\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Sm50\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Sm50} = 0 \quad (1711)$$

## 8.44 Species GENE\_E\_Snail

**Name** GENE\_E\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Snail\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Snail} = 0 \quad (1712)$$

## 8.45 Species GENE\_E\_SoxB1

**Name** GENE\_E\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_SoxB1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_SoxB1} = 0 \quad (1713)$$

## 8.46 Species GENE\_E\_SoxC

**Name** GENE\_E\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_SoxC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_SoxC} = 0 \quad (1714)$$

## 8.47 Species GENE\_E\_SuTx

**Name** GENE\_E\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_SuTx\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_SuTx} = 0 \quad (1715)$$

## 8.48 Species GENE\_E\_TBr

**Name** GENE\_E\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_TBr\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_TBr} = 0 \quad (1716)$$

## 8.49 Species GENE\_E\_Tel

**Name** GENE\_E\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Tel\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Tel} = 0 \quad (1717)$$

## 8.50 Species GENE\_E\_Tgif

**Name** GENE\_E\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Tgif\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_E\_Tgif} = 0 \quad (1718)$$

## 8.51 Species GENE\_E\_VEGFR

**Name** GENE\_E\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_VEGFR\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_VEGFR} = 0 \quad (1719)$$

## 8.52 Species GENE\_E\_Wnt8

**Name** GENE\_E\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_Wnt8\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_Wnt8} = 0 \quad (1720)$$

## 8.53 Species GENE\_E\_z13

**Name** GENE\_E\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_E\\_z13\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_E\_z13} = 0 \quad (1721)$$

## 8.54 Species GENE\_M\_Alx1

**Name** GENE\_M\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Alx1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Alx1} = 0 \quad (1722)$$

## 8.55 Species GENE\_M\_Apobec

**Name** GENE\_M\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in `GENE_M_Apobec_transcription_0`), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Apobec} = 0 \quad (1723)$$

## 8.56 Species GENE\_M\_Blimp1

**Name** GENE\_M\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in `GENE_M_Blimp1_transcription_0`), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Blimp1} = 0 \quad (1724)$$

## 8.57 Species GENE\_M\_Bra

**Name** GENE\_M\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in `GENE_M_Bra_transcription_0`), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Bra} = 0 \quad (1725)$$

## 8.58 Species GENE\_M\_Brn

**Name** GENE\_M\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in `GENE_M_Brn_transcription_0`), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Brn} = 0 \quad (1726)$$

## 8.59 Species GENE\_M\_CAPK

**Name** GENE\_M\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_CAPK\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_CAPK} = 0 \quad (1727)$$

## 8.60 Species GENE\_M\_CyP

**Name** GENE\_M\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_CyP\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_CyP} = 0 \quad (1728)$$

## 8.61 Species GENE\_M\_Delta

**Name** GENE\_M\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Delta\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Delta} = 0 \quad (1729)$$

## 8.62 Species GENE\_M\_Dpt

**Name** GENE\_M\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Dpt\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Dpt} = 0 \quad (1730)$$

## 8.63 Species GENE\_M\_Dri

**Name** GENE\_M\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Dri\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Dri} = 0 \quad (1731)$$

## 8.64 Species GENE\_M\_Endo16

**Name** GENE\_M\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Endo16\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Endo16} = 0 \quad (1732)$$

## 8.65 Species GENE\_M\_Erg

**Name** GENE\_M\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Erg\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Erg} = 0 \quad (1733)$$

## 8.66 Species GENE\_M\_Ets1

**Name** GENE\_M\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Ets1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Ets1} = 0 \quad (1734)$$

## 8.67 Species GENE\_M\_Eve

**Name** GENE\_M\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Eve\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Eve} = 0 \quad (1735)$$

## 8.68 Species GENE\_M\_Ficolin

**Name** GENE\_M\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Ficolin\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Ficolin} = 0 \quad (1736)$$

## 8.69 Species GENE\_M\_FoxA

**Name** GENE\_M\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_FoxA\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_FoxA} = 0 \quad (1737)$$

## 8.70 Species GENE\_M\_FoxB

**Name** GENE\_M\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_FoxB\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_FoxB} = 0 \quad (1738)$$

## 8.71 Species GENE\_M\_FoxN23

**Name** GENE\_M\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_FoxN23\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_FoxN23} = 0 \quad (1739)$$

## 8.72 Species GENE\_M\_FoxO

**Name** GENE\_M\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_FoxO\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_FoxO} = 0 \quad (1740)$$

## 8.73 Species GENE\_M\_FvMo

**Name** GENE\_M\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_FvMo\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_FvMo} = 0 \quad (1741)$$

## 8.74 Species GENE\_M\_GataC

**Name** GENE\_M\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_GataC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_GataC} = 0 \quad (1742)$$

## 8.75 Species GENE\_M\_GataE

**Name** GENE\_M\_GataE

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_GataE\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_GataE} = 0 \quad (1743)$$

## 8.76 Species GENE\_M\_Gcad

**Name** GENE\_M\_Gcad

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Gcad\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Gcad} = 0 \quad (1744)$$

## 8.77 Species GENE\_M\_Gcm

**Name** GENE\_M\_Gcm

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Gcm\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Gcm} = 0 \quad (1745)$$

## 8.78 Species GENE\_M\_Gelsolin

**Name** GENE\_M\_Gelsolin

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Gelsolin\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Gelsolin} = 0 \quad (1746)$$

## 8.79 Species GENE\_M\_HesC

**Name** GENE\_M\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_HesC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_HesC} = 0 \quad (1747)$$

## 8.80 Species GENE\_M\_Hex

**Name** GENE\_M\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Hex\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Hex} = 0 \quad (1748)$$

## 8.81 Species GENE\_M\_Hnf6

**Name** GENE\_M\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Hnf6\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Hnf6} = 0 \quad (1749)$$

## 8.82 Species GENE\_M\_Hox

**Name** GENE\_M\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Hox\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Hox} = 0 \quad (1750)$$

## 8.83 Species GENE\_M\_Kakapo

**Name** GENE\_M\_Kakapo

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Kakapo\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Kakapo} = 0 \quad (1751)$$

## 8.84 Species GENE\_M\_Lim

**Name** GENE\_M\_Lim

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Lim\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Lim} = 0 \quad (1752)$$

## 8.85 Species GENE\_M\_Msp130

**Name** GENE\_M\_Msp130

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Msp130\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Msp130} = 0 \quad (1753)$$

## 8.86 Species GENE\_M\_MspL

**Name** GENE\_M\_MspL

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_M\\_MspL\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_MspL} = 0 \quad (1754)$$

## 8.87 Species GENE\_M\_Not

**Name** GENE\_M\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Not\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Not} = 0 \quad (1755)$$

## 8.88 Species GENE\_M\_Nrl

**Name** GENE\_M\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Nrl\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Nrl} = 0 \quad (1756)$$

## 8.89 Species GENE\_M\_OrCt

**Name** GENE\_M\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_OrCt\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_OrCt} = 0 \quad (1757)$$

## 8.90 Species GENE\_M\_Otx

**Name** GENE\_M\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Otx\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Otx} = 0 \quad (1758)$$

## 8.91 Species GENE\_M\_Pks

**Name** GENE\_M\_Pks

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Pks\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Pks} = 0 \quad (1759)$$

## 8.92 Species GENE\_M\_Pmar1

**Name** GENE\_M\_Pmar1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Pmar1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Pmar1} = 0 \quad (1760)$$

## 8.93 Species GENE\_M\_Sm27

**Name** GENE\_M\_Sm27

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Sm27\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Sm27} = 0 \quad (1761)$$

## 8.94 Species GENE\_M\_Sm30

**Name** GENE\_M\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Sm30\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Sm30} = 0 \quad (1762)$$

## 8.95 Species GENE\_M\_Sm50

**Name** GENE\_M\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Sm50\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_M\_Sm50} = 0 \quad (1763)$$

## 8.96 Species GENE\_M\_Snail

**Name** GENE\_M\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Snail\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_M\_Snail} = 0 \quad (1764)$$

## 8.97 Species GENE\_M\_SoxB1

**Name** GENE\_M\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_SoxB1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_M\_SoxB1} = 0 \quad (1765)$$

## 8.98 Species GENE\_M\_SoxC

**Name** GENE\_M\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_SoxC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_M\_SoxC} = 0 \quad (1766)$$

## 8.99 Species GENE\_M\_SuTx

**Name** GENE\_M\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_SuTx\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_SuTx} = 0 \quad (1767)$$

## 8.100 Species GENE\_M\_TBr

**Name** GENE\_M\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_TBr\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_TBr} = 0 \quad (1768)$$

## 8.101 Species GENE\_M\_Tel

**Name** GENE\_M\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Tel\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Tel} = 0 \quad (1769)$$

## 8.102 Species GENE\_M\_Tgif

**Name** GENE\_M\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Tgif\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Tgif} = 0 \quad (1770)$$

## 8.103 Species GENE\_M\_VEGFR

**Name** GENE\_M\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_VEGFR\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_VEGFR} = 0 \quad (1771)$$

## 8.104 Species GENE\_M\_Wnt8

**Name** GENE\_M\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_Wnt8\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_Wnt8} = 0 \quad (1772)$$

## 8.105 Species GENE\_M\_z13

**Name** GENE\_M\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_M\\_z13\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_M\_z13} = 0 \quad (1773)$$

## 8.106 Species GENE\_P\_Alx1

**Name** GENE\_P\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Alx1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Alx1} = 0 \quad (1774)$$

## 8.107 Species GENE\_P\_Apobec

**Name** GENE\_P\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Apobec\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Apobec} = 0 \quad (1775)$$

## 8.108 Species GENE\_P\_Blimp1

**Name** GENE\_P\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Blimp1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Blimp1} = 0 \quad (1776)$$

## 8.109 Species GENE\_P\_Bra

**Name** GENE\_P\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Bra\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Bra} = 0 \quad (1777)$$

## 8.110 Species GENE\_P\_Brn

**Name** GENE\_P\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Brn\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Brn} = 0 \quad (1778)$$

### 8.111 Species GENE\_P\_CAPK

**Name** GENE\_P\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

$$\frac{d}{dt} \text{GENE\_P\_CAPK} = 0 \quad (1779)$$

### 8.112 Species GENE\_P\_CyP

**Name** GENE\_P\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_CyP\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_CyP} = 0 \quad (1780)$$

### 8.113 Species GENE\_P\_Delta

**Name** GENE\_P\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Delta\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Delta} = 0 \quad (1781)$$

### 8.114 Species GENE\_P\_Dpt

**Name** GENE\_P\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Dpt\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Dpt} = 0 \quad (1782)$$

## 8.115 Species GENE\_P\_Dri

**Name** GENE\_P\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Dri\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Dri} = 0 \quad (1783)$$

## 8.116 Species GENE\_P\_Endo16

**Name** GENE\_P\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Endo16\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Endo16} = 0 \quad (1784)$$

## 8.117 Species GENE\_P\_Erg

**Name** GENE\_P\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Erg\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Erg} = 0 \quad (1785)$$

## 8.118 Species GENE\_P\_Ets1

**Name** GENE\_P\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Ets1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Ets1} = 0 \quad (1786)$$

## 8.119 Species GENE\_P\_Eve

**Name** GENE\_P\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Eve\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Eve} = 0 \quad (1787)$$

## 8.120 Species GENE\_P\_Ficolin

**Name** GENE\_P\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Ficolin\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Ficolin} = 0 \quad (1788)$$

## 8.121 Species GENE\_P\_FoxA

**Name** GENE\_P\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_FoxA\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_FoxA} = 0 \quad (1789)$$

## 8.122 Species GENE\_P\_FoxB

**Name** GENE\_P\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_FoxB\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_FoxB} = 0 \quad (1790)$$

### 8.123 Species GENE\_P\_FoxN23

**Name** GENE\_P\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_FoxN23\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_FoxN23} = 0 \quad (1791)$$

### 8.124 Species GENE\_P\_FoxO

**Name** GENE\_P\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_FoxO\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_FoxO} = 0 \quad (1792)$$

### 8.125 Species GENE\_P\_FvMo

**Name** GENE\_P\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_FvMo\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_FvMo} = 0 \quad (1793)$$

### 8.126 Species GENE\_P\_GataC

**Name** GENE\_P\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_GataC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_GataC} = 0 \quad (1794)$$

### 8.127 Species GENE\_P\_GataE

**Name** GENE\_P\_GataE

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_P\\_GataE\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_GataE} = 0 \quad (1795)$$

### 8.128 Species GENE\_P\_Gcad

**Name** GENE\_P\_Gcad

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Gcad\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Gcad} = 0 \quad (1796)$$

### 8.129 Species GENE\_P\_Gcm

**Name** GENE\_P\_Gcm

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Gcm\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Gcm} = 0 \quad (1797)$$

### 8.130 Species GENE\_P\_Gelsolin

**Name** GENE\_P\_Gelsolin

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Gelsolin\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Gelsolin} = 0 \quad (1798)$$

### 8.131 Species GENE\_P\_HesC

**Name** GENE\_P\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_HesC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_HesC} = 0 \quad (1799)$$

### 8.132 Species GENE\_P\_Hex

**Name** GENE\_P\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Hex\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Hex} = 0 \quad (1800)$$

### 8.133 Species GENE\_P\_Hnf6

**Name** GENE\_P\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Hnf6\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Hnf6} = 0 \quad (1801)$$

### 8.134 Species GENE\_P\_Hox

**Name** GENE\_P\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Hox\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Hox} = 0 \quad (1802)$$

## 8.135 Species GENE\_P\_Kakapo

**Name** GENE\_P\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Kakapo\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Kakapo} = 0 \quad (1803)$$

## 8.136 Species GENE\_P\_Lim

**Name** GENE\_P\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Lim\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Lim} = 0 \quad (1804)$$

## 8.137 Species GENE\_P\_Msp130

**Name** GENE\_P\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Msp130\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Msp130} = 0 \quad (1805)$$

## 8.138 Species GENE\_P\_MspL

**Name** GENE\_P\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_MspL\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_MspL} = 0 \quad (1806)$$

### 8.139 Species GENE\_P\_Not

**Name** GENE\_P\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Not\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Not} = 0 \quad (1807)$$

### 8.140 Species GENE\_P\_Nrl

**Name** GENE\_P\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Nrl\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Nrl} = 0 \quad (1808)$$

### 8.141 Species GENE\_P\_OrCt

**Name** GENE\_P\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_OrCt\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_OrCt} = 0 \quad (1809)$$

### 8.142 Species GENE\_P\_Otx

**Name** GENE\_P\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Otx\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Otx} = 0 \quad (1810)$$

### 8.143 Species GENE\_P\_Pks

**Name** GENE\_P\_Pks

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Pks\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Pks} = 0 \quad (1811)$$

### 8.144 Species GENE\_P\_Pmar1

**Name** GENE\_P\_Pmar1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Pmar1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Pmar1} = 0 \quad (1812)$$

### 8.145 Species GENE\_P\_Sm27

**Name** GENE\_P\_Sm27

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Sm27\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Sm27} = 0 \quad (1813)$$

### 8.146 Species GENE\_P\_Sm30

**Name** GENE\_P\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Sm30\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Sm30} = 0 \quad (1814)$$

### 8.147 Species GENE\_P\_Sm50

**Name** GENE\_P\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Sm50\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Sm50} = 0 \quad (1815)$$

### 8.148 Species GENE\_P\_Snail

**Name** GENE\_P\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Snail\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Snail} = 0 \quad (1816)$$

### 8.149 Species GENE\_P\_SoxB1

**Name** GENE\_P\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_SoxB1\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_SoxB1} = 0 \quad (1817)$$

### 8.150 Species GENE\_P\_SoxC

**Name** GENE\_P\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_SoxC\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_SoxC} = 0 \quad (1818)$$

### 8.151 Species GENE\_P\_SuTx

**Name** GENE\_P\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_SuTx\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_SuTx} = 0 \quad (1819)$$

### 8.152 Species GENE\_P\_TBr

**Name** GENE\_P\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_TBr\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_TBr} = 0 \quad (1820)$$

### 8.153 Species GENE\_P\_Tel

**Name** GENE\_P\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Tel\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Tel} = 0 \quad (1821)$$

### 8.154 Species GENE\_P\_Tgif

**Name** GENE\_P\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Tgif\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{GENE\_P\_Tgif} = 0 \quad (1822)$$

## 8.155 Species GENE\_P\_VEGFR

**Name** GENE\_P\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_VEGFR\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_VEGFR} = 0 \quad (1823)$$

## 8.156 Species GENE\_P\_Wnt8

**Name** GENE\_P\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_Wnt8\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_Wnt8} = 0 \quad (1824)$$

## 8.157 Species GENE\_P\_z13

**Name** GENE\_P\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [GENE\\_P\\_z13\\_transcription\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{GENE\_P\_z13} = 0 \quad (1825)$$

## 8.158 Species PRE\_E\_Gcad

**Name** PRE\_E\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_Gcad\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_E\_Gcad} = 0 \quad (1826)$$

### 8.159 Species PRE\_E\_Notch

**Name** PRE\_E\_Notch

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_Notch\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_E\_Notch} = 0 \quad (1827)$$

### 8.160 Species PRE\_E\_Otx

**Name** PRE\_E\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_Otx\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_E\_Otx} = 0 \quad (1828)$$

### 8.161 Species PRE\_E\_SoxB1

**Name** PRE\_E\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_SoxB1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_E\_SoxB1} = 0 \quad (1829)$$

### 8.162 Species PRE\_E\_SuH

**Name** PRE\_E\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_SuH\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_E\_SuH} = 0 \quad (1830)$$

### 8.163 Species PRE\_E\_UMR

**Name** PRE\_E\_UMR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_UMR\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_E\_UMR} = 0 \quad (1831)$$

### 8.164 Species PRE\_E\_UVA0tx

**Name** PRE\_E\_UVA0tx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_UVA0tx\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_E\_UVA0tx} = 0 \quad (1832)$$

### 8.165 Species PRE\_E\_UbiqSoxB1

**Name** PRE\_E\_UbiqSoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_UbiqSoxB1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_E\_UbiqSoxB1} = 0 \quad (1833)$$

### 8.166 Species PRE\_E\_VEGF

**Name** PRE\_E\_VEGF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_VEGF\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_E\_VEGF} = 0 \quad (1834)$$

### 8.167 Species PRE\_E\_cB

**Name** PRE\_E\_cB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [E\\_cB\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_E\_cB} = 0 \quad (1835)$$

### 8.168 Species PRE\_M\_Gcad

**Name** PRE\_M\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_Gcad\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_Gcad} = 0 \quad (1836)$$

### 8.169 Species PRE\_M\_Notch

**Name** PRE\_M\_Notch

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_Notch\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_Notch} = 0 \quad (1837)$$

### 8.170 Species PRE\_M\_Otx

**Name** PRE\_M\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_Otx\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_Otx} = 0 \quad (1838)$$

### 8.171 Species PRE\_M\_SoxB1

**Name** PRE\_M\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_SoxB1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_SoxB1} = 0 \quad (1839)$$

### 8.172 Species PRE\_M\_SuH

**Name** PRE\_M\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_SuH\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_SuH} = 0 \quad (1840)$$

### 8.173 Species PRE\_M\_UMADelta

**Name** PRE\_M\_UMADelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_UMADelta\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_UMADelta} = 0 \quad (1841)$$

### 8.174 Species PRE\_M\_UMANrl

**Name** PRE\_M\_UMANrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_UMANrl\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_M\_UMANrl} = 0 \quad (1842)$$

### 8.175 Species PRE\_M\_UMR

**Name** PRE\_M\_UMR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_UMR\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_M\_UMR} = 0 \quad (1843)$$

### 8.176 Species PRE\_M\_UbiqSoxB1

**Name** PRE\_M\_UbiqSoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_UbiqSoxB1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_M\_UbiqSoxB1} = 0 \quad (1844)$$

### 8.177 Species PRE\_M\_cB

**Name** PRE\_M\_cB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [M\\_cB\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_M\_cB} = 0 \quad (1845)$$

### 8.178 Species PRE\_P\_Ets1

**Name** PRE\_P\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_Ets1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_P\_Ets1} = 0 \quad (1846)$$

### 8.179 Species PRE\_P\_Gcad

**Name** PRE\_P\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_Gcad\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_Gcad} = 0 \quad (1847)$$

### 8.180 Species PRE\_P\_L1

**Name** PRE\_P\_L1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_L1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_L1} = 0 \quad (1848)$$

### 8.181 Species PRE\_P\_Otx

**Name** PRE\_P\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_Otx\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_Otx} = 0 \quad (1849)$$

### 8.182 Species PRE\_P\_UbiqAlx1

**Name** PRE\_P\_UbiqAlx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqAlx1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_UbiqAlx1} = 0 \quad (1850)$$

### 8.183 Species PRE\_P\_UbiqES

**Name** PRE\_P\_UbiqES

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqES\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_UbiqES} = 0 \quad (1851)$$

### 8.184 Species PRE\_P\_UbiqEts1

**Name** PRE\_P\_UbiqEts1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqEts1\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_UbiqEts1} = 0 \quad (1852)$$

### 8.185 Species PRE\_P\_UbiqHesC

**Name** PRE\_P\_UbiqHesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqHesC\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_UbiqHesC} = 0 \quad (1853)$$

### 8.186 Species PRE\_P\_UbiqHnf6

**Name** PRE\_P\_UbiqHnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqHnf6\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt} \text{PRE\_P\_UbiqHnf6} = 0 \quad (1854)$$

### 8.187 Species PRE\_P\_UbiqSoxC

**Name** PRE\_P\_UbiqSoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqSoxC\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_P\_UbiqSoxC} = 0 \quad (1855)$$

### 8.188 Species PRE\_P\_UbiqTel

**Name** PRE\_P\_UbiqTel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_UbiqTel\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_P\_UbiqTel} = 0 \quad (1856)$$

### 8.189 Species PRE\_P\_cB

**Name** PRE\_P\_cB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a reactant in [P\\_cB\\_Hill\\_Kinetic\\_0](#)), which does not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{PRE\_P\_cB} = 0 \quad (1857)$$

### 8.190 Species PROTEIN\_E\_Alx1

**Name** PROTEIN\_E\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in [PROTEIN\\_E\\_Alx1\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Alx1\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Dri\\_transcription\\_0](#), [GENE\\_E\\_FoxB\\_transcription\\_0](#), [GENE\\_E\\_Gcm\\_transcription\\_0](#), [GENE\\_E\\_Msp130\\_transcription\\_0](#), [GENE\\_E\\_MspL\\_transcription\\_0](#), [GENE\\_E\\_Sm27\\_transcription\\_0](#), [GENE\\_E\\_Sm50\\_transcription\\_0](#), [GENE\\_E\\_VEGFR\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_E\_Alx1} = \text{v}_{420} - \text{v}_{176} \quad (1858)$$

## 8.191 Species PROTEIN\_E\_Apobec

**Name** PROTEIN\_E\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_Apobec\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Apobec\\_translation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_E\_Apobec} = \text{v}_{422} - \text{v}_{177} \quad (1859)$$

## 8.192 Species PROTEIN\_E\_Blimp1

**Name** PROTEIN\_E\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in [PROTEIN\\_E\\_Blimp1\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Blimp1\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Blimp1\\_transcription\\_0](#), [GENE\\_E\\_Eve\\_transcription\\_0](#), [GENE\\_E\\_Hox\\_transcription\\_0](#), [GENE\\_E\\_Otx\\_transcription\\_0](#), [GENE\\_E\\_Wnt8\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_E\_Blimp1} = \text{v}_{424} - \text{v}_{178} \quad (1860)$$

## 8.193 Species PROTEIN\_E\_Bra

**Name** PROTEIN\_E\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 15 reactions (as a reactant in [PROTEIN\\_E\\_Bra\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Bra\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Apobec\\_transcription\\_0](#), [GENE\\_E\\_FoxA\\_transcription\\_0](#), [GENE\\_E\\_Gelsolin\\_transcription\\_0](#), [GENE\\_E\\_Kakapo\\_transcription\\_0](#), [GENE\\_E\\_OrCt\\_transcription\\_0](#), [GENE\\_M\\_Apobec\\_transcription\\_0](#), [GENE\\_M\\_CAPK\\_transcription\\_0](#), [GENE\\_M\\_Dpt\\_transcription\\_0](#), [GENE\\_M\\_Gelsolin\\_transcription\\_0](#), [GENE\\_M\\_Kakapo\\_transcription\\_0](#), [GENE\\_M\\_Nrl\\_transcription\\_0](#), [GENE\\_M\\_OrCt\\_transcription\\_0](#), [GENE\\_M\\_Pks\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_E\_Bra} = \text{v}_{426} - \text{v}_{179} \quad (1861)$$

## 8.194 Species PROTEIN\_E\_Brn

**Name** PROTEIN\_E\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_Brn\_degradation\_0 and as a product in mRNA\_E\_Brn\_translation\_0 and as a modifier in GENE\_E\_Blimp1\_transcription\_0, GENE\_E\_Endo16\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Brn} = v_{428} - v_{180} \quad (1862)$$

## 8.195 Species PROTEIN\_E\_CAPK

**Name** PROTEIN\_E\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_CAPK\_degradation\_0 and as a product in mRNA\_E\_CAPK\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_CAPK} = v_{430} - v_{181} \quad (1863)$$

## 8.196 Species PROTEIN\_E\_CyP

**Name** PROTEIN\_E\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_CyP\_degradation\_0 and as a product in mRNA\_E\_CyP\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_CyP} = v_{432} - v_{182} \quad (1864)$$

## 8.197 Species PROTEIN\_E\_Delta

**Name** PROTEIN\_E\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_Delta\_degradation\_0, PROTEIN\_E\_Delta\_inactivation\_0 and as a product in PROTEIN\_E\_Delta\_activation\_0, mRNA\_E\_Delta\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Delta} = v_{183} + v_{434} - v_{184} - v_{185} \quad (1865)$$

## 8.198 Species PROTEIN\_E\_Delta2

**Name** PROTEIN\_E\_Delta2

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_Delta\_activation\_0 and as a product in PROTEIN\_E\_Delta\_inactivation\_0 and as a modifier in PROTEIN\_E\_Notch\_activation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Delta2} = v_{185} - v_{183} \quad (1866)$$

## 8.199 Species PROTEIN\_E\_Dpt

**Name** PROTEIN\_E\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_Dpt\_degradation\_0 and as a product in mRNA\_E\_Dpt\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Dpt} = v_{436} - v_{186} \quad (1867)$$

## 8.200 Species PROTEIN\_E\_Dri

**Name** PROTEIN\_E\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in PROTEIN\_E\_Dri\_degradation\_0 and as a product in mRNA\_E\_Dri\_translation\_0 and as a modifier in GENE\_E\_CyP\_transcription\_0, GENE\_E\_ES\_transcription\_0, GENE\_E\_FoxB\_transcription\_0, GENE\_E\_Sm27\_transcription\_0, GENE\_E\_Sm50\_transcription\_0, GENE\_E\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Dri} = v_{438} - v_{187} \quad (1868)$$

## 8.201 Species PROTEIN\_E\_ES

**Name** PROTEIN\_E\_ES

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_ES\_degradation\_0 and as a product in mRNA\_E\_ES\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_ES} = v_{440} - v_{188} \quad (1869)$$

## 8.202 Species PROTEIN\_E\_Endo16

**Name** PROTEIN\_E\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_Endo16\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Endo16\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Endo16} = v_{442} - v_{189} \quad (1870)$$

## 8.203 Species PROTEIN\_E\_Erg

**Name** PROTEIN\_E\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in [PROTEIN\\_E\\_Erg\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Erg\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Ficolin\\_transcription\\_0](#), [GENE\\_E\\_FoxO\\_transcription\\_0](#), [GENE\\_E\\_Hex\\_transcription\\_0](#), [GENE\\_E\\_Msp130\\_transcription\\_0](#), [GENE\\_E\\_MspL\\_transcription\\_0](#), [GENE\\_E\\_Sm27\\_transcription\\_0](#), [GENE\\_E\\_Sm50\\_transcription\\_0](#), [GENE\\_E\\_Tgif\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Erg} = v_{444} - v_{190} \quad (1871)$$

## 8.204 Species PROTEIN\_E\_Ets1

**Name** PROTEIN\_E\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 18 reactions (as a reactant in [PROTEIN\\_E\\_Ets1\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Ets1\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Alx1\\_transcription\\_0](#), [GENE\\_E\\_CyP\\_transcription\\_0](#), [GENE\\_E\\_Delta\\_transcription\\_0](#), [GENE\\_E\\_Dri\\_transcription\\_0](#), [GENE\\_E\\_Erg\\_transcription\\_0](#), [GENE\\_E\\_Ficolin\\_transcription\\_0](#), [GENE\\_E\\_FoxB\\_transcription\\_0](#), [GENE\\_E\\_FoxO\\_transcription\\_0](#), [GENE\\_E\\_Hex\\_transcription\\_0](#), [GENE\\_E\\_Msp130\\_transcription\\_0](#), [GENE\\_E\\_MspL\\_transcription\\_0](#), [GENE\\_E\\_Sm27\\_transcription\\_0](#), [GENE\\_E\\_Sm50\\_transcription\\_0](#), [GENE\\_E\\_TBr\\_transcription\\_0](#), [GENE\\_E\\_Tgif\\_transcription\\_0](#), [GENE\\_E\\_VEGFR\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Ets1} = v_{446} - v_{191} \quad (1872)$$

## 8.205 Species PROTEIN\_E\_Eve

**Name** PROTEIN\_E\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_Eve\_degradation\_0 and as a product in mRNA\_E\_Eve\_translation\_0 and as a modifier in GENE\_E\_Blimp1\_transcription\_0, GENE\_E\_Hox\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Eve} = v_{448} - v_{192} \quad (1873)$$

## 8.206 Species PROTEIN\_E\_Ficolin

**Name** PROTEIN\_E\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_Ficolin\_degradation\_0 and as a product in mRNA\_E\_Ficolin\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Ficolin} = v_{450} - v_{193} \quad (1874)$$

## 8.207 Species PROTEIN\_E\_FoxA

**Name** PROTEIN\_E\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_FoxA\_degradation\_0 and as a product in mRNA\_E\_FoxA\_translation\_0 and as a modifier in GENE\_E\_FoxA\_transcription\_0, GENE\_E\_Gcm\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_FoxA} = v_{452} - v_{194} \quad (1875)$$

## 8.208 Species PROTEIN\_E\_FoxB

**Name** PROTEIN\_E\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_FoxB\_degradation\_0 and as a product in mRNA\_E\_FoxB\_translation\_0 and as a modifier in GENE\_E\_FoxB\_transcription\_0, GENE\_E\_Msp130\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_FoxB} = v_{454} - v_{195} \quad (1876)$$

## 8.209 Species PROTEIN\_E\_FoxN23

**Name** PROTEIN\_E\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_FoxN23\_degradation\_0 and as a product in mRNA\_E\_FoxN23\_translation\_0 and as a modifier in GENE\_E\_Nrl\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_FoxN23} = v_{456} - v_{196} \quad (1877)$$

## 8.210 Species PROTEIN\_E\_FoxO

**Name** PROTEIN\_E\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_FoxO\_degradation\_0 and as a product in mRNA\_E\_FoxO\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_FoxO} = v_{458} - v_{197} \quad (1878)$$

## 8.211 Species PROTEIN\_E\_FvMo

**Name** PROTEIN\_E\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_FvMo\_degradation\_0 and as a product in mRNA\_E\_FvMo\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_FvMo} = v_{460} - v_{198} \quad (1879)$$

## 8.212 Species PROTEIN\_E\_GSK3\_a

**Name** PROTEIN\_E\_GSK3\_a

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_GSK3\_i\_activation\_0 and as a product in PROTEIN\_E\_GSK3\_i\_inactivation\_0 and as a modifier in PROTEIN\_E\_cB\_a\_degradation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_GSK3\_a} = v_{200} - v_{199} \quad (1880)$$

## 8.213 Species PROTEIN\_E\_GSK3\_i

**Name** PROTEIN\_E\_GSK3\_i

**Initial concentration** 20 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_GSK3\_i\_inactivation\_0 and as a product in PROTEIN\_E\_GSK3\_i\_activation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_GSK3\_i} = v_{199} - v_{200} \quad (1881)$$

## 8.214 Species PROTEIN\_E\_GataC

**Name** PROTEIN\_E\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_GataC\_degradation\_0 and as a product in mRNA\_E\_GataC\_translation\_0 and as a modifier in GENE\_E\_GataC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_GataC} = v_{462} - v_{201} \quad (1882)$$

## 8.215 Species PROTEIN\_E\_GataE

**Name** PROTEIN\_E\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 14 reactions (as a reactant in PROTEIN\_E\_GataE\_degradation\_0 and as a product in mRNA\_E\_GataE\_translation\_0 and as a modifier in GENE\_E\_Blimp1\_transcription\_0, GENE\_E\_Bra\_transcription\_0, GENE\_E\_Brn\_transcription\_0, GENE\_E\_FoxA\_transcription\_0, GENE\_E\_FvMo\_transcription\_0, GENE\_E\_GataC\_transcription\_0, GENE\_E\_Lim\_transcription\_0, GENE\_E\_Not\_transcription\_0, GENE\_E\_Nrl\_transcription\_0, GENE\_E\_Otx\_transcription\_0, GENE\_E\_Pks\_transcription\_0, GENE\_E\_SuTx\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_GataE} = v_{464} - v_{202} \quad (1883)$$

## 8.216 Species PROTEIN\_E\_Gcad

**Name** PROTEIN\_E\_Gcad

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_Gcad\_degradation\_0 and as a product in mRNA\_E\_Gcad\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Gcad} = v_{466} - v_{203} \quad (1884)$$

## 8.217 Species PROTEIN\_E\_Gcm

**Name** PROTEIN\_E\_Gcm

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in eight reactions (as a reactant in [PROTEIN\\_E\\_Gcm\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Gcm\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Alx1\\_transcription\\_0](#), [GENE\\_E\\_Dpt\\_transcription\\_0](#), [GENE\\_E\\_FvMo\\_transcription\\_0](#), [GENE\\_E\\_Gcm\\_transcription\\_0](#), [GENE\\_E\\_Pks\\_transcription\\_0](#), [GENE\\_E\\_SuTx\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Gcm} = v_{468} - v_{204} \quad (1885)$$

## 8.218 Species PROTEIN\_E\_Gelsolin

**Name** PROTEIN\_E\_Gelsolin

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_Gelsolin\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Gelsolin\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Gelsolin} = v_{470} - v_{205} \quad (1886)$$

## 8.219 Species PROTEIN\_E\_Gro

**Name** PROTEIN\_E\_Gro

**Initial concentration**  $30 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_GroTCF\\_accociation\\_0](#) and as a product in [PROTEIN\\_E\\_GroTCF\\_dissociation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Gro} = v_{207} - v_{206} \quad (1887)$$

## 8.220 Species PROTEIN\_E\_GroTCF

**Name** PROTEIN\_E\_GroTCF

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in ten reactions (as a reactant in [PROTEIN\\_E\\_GroTCF\\_dissociation\\_0](#) and as a product in [PROTEIN\\_E\\_GroTCF\\_accociation\\_0](#) and as a modifier in [GENE\\_E\\_Blimp1\\_transcription\\_0](#), [GENE\\_E\\_Bra\\_transcription\\_0](#), [GENE\\_E\\_Eve\\_transcription\\_0](#), [GENE\\_E\\_Gcm\\_transcription\\_0](#), [GENE\\_E\\_Hox\\_transcription\\_0](#), [GENE\\_E\\_Pmar1\\_transcription\\_0](#), [GENE\\_E\\_Wnt8\\_transcription\\_0](#), [GENE\\_E\\_z13\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_GroTCF} = v_{206} - v_{207} \quad (1888)$$

## 8.221 Species PROTEIN\_E\_GroTFC

**Name** PROTEIN\_E\_GroTFC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in GENE\_E\_FoxA\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_GroTFC} = 0 \quad (1889)$$

## 8.222 Species PROTEIN\_E\_HesC

**Name** PROTEIN\_E\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in PROTEIN\_E\_HesC\_degradation\_0 and as a product in mRNA\_E\_HesC\_translation\_0 and as a modifier in GENE\_E\_Alx1\_transcription\_0, GENE\_E\_Delta\_transcription\_0, GENE\_E\_ES\_transcription\_0, GENE\_E\_Ets1\_transcription\_0, GENE\_E\_Nrl\_transcription\_0, GENE\_E\_SoxC\_transcription\_0, GENE\_E\_TBr\_transcription\_0, GENE\_E\_Tel\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_HesC} = v_{472} - v_{208} \quad (1890)$$

## 8.223 Species PROTEIN\_E\_Hex

**Name** PROTEIN\_E\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in twelve reactions (as a reactant in PROTEIN\_E\_Hex\_degradation\_0 and as a product in mRNA\_E\_Hex\_translation\_0 and as a modifier in GENE\_E\_Erg\_transcription\_0, GENE\_E\_Ficolin\_transcription\_0, GENE\_E\_FoxO\_transcription\_0, GENE\_E\_Msp130\_transcription\_0, GENE\_E\_MspL\_transcription\_0, GENE\_E\_Sm27\_transcription\_0, GENE\_E\_Sm50\_transcription\_0, GENE\_E\_Snail\_transcription\_0, GENE\_E\_Tgif\_transcription\_0, GENE\_E\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Hex} = v_{474} - v_{209} \quad (1891)$$

## 8.224 Species PROTEIN\_E\_Hnf6

**Name** PROTEIN\_E\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in [PROTEIN\\_E\\_Hnf6\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Hnf6\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Ficolin\\_transcription\\_0](#), [GENE\\_E\\_GataC\\_transcription\\_0](#), [GENE\\_E\\_Msp130\\_transcription\\_0](#), [GENE\\_E\\_Sm27\\_transcription\\_0](#), [GENE\\_E\\_Sm50\\_transcription\\_0](#), [GENE\\_E\\_z13\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Hnf6} = v_{476} - v_{210} \quad (1892)$$

### [8.225 Species PROTEIN\\_E\\_Hox](#)

**Name** PROTEIN\_E\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in six reactions (as a reactant in [PROTEIN\\_E\\_Hox\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Hox\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Apobec\\_transcription\\_0](#), [GENE\\_E\\_Eve\\_transcription\\_0](#), [GENE\\_E\\_GataE\\_transcription\\_0](#), [GENE\\_E\\_OrCt\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Hox} = v_{478} - v_{211} \quad (1893)$$

### [8.226 Species PROTEIN\\_E\\_Kakapo](#)

**Name** PROTEIN\_E\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_Kakapo\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_Kakapo\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_Kakapo} = v_{480} - v_{212} \quad (1894)$$

### [8.227 Species PROTEIN\\_E\\_L1](#)

**Name** PROTEIN\_E\_L1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_VEGFSignal\\_accociation\\_0](#) and as a product in [PROTEIN\\_E\\_VEGFSignal\\_dissociation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_L1} = v_{243} - v_{242} \quad (1895)$$

## 8.228 Species PROTEIN\_E\_Lim

**Name** PROTEIN\_E\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in `PROTEIN_E_Lim_degradation_0` and as a product in `mRNA_E_Lim_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Lim} = v_{482} - v_{213} \quad (1896)$$

## 8.229 Species PROTEIN\_E\_Msp130

**Name** PROTEIN\_E\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in `PROTEIN_E_Msp130_degradation_0` and as a product in `mRNA_E_Msp130_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Msp130} = v_{484} - v_{214} \quad (1897)$$

## 8.230 Species PROTEIN\_E\_MspL

**Name** PROTEIN\_E\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in `PROTEIN_E_MspL_degradation_0` and as a product in `mRNA_E_MspL_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_MspL} = v_{486} - v_{215} \quad (1898)$$

## 8.231 Species PROTEIN\_E\_Not

**Name** PROTEIN\_E\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in `PROTEIN_E_Not_degradation_0` and as a product in `mRNA_E_Not_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Not} = v_{488} - v_{216} \quad (1899)$$

## 8.232 Species PROTEIN\_E\_Notch

**Name** PROTEIN\_E\_Notch

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_Notch\_degradation\_0, PROTEIN\_E\_Notch\_inactivation\_0 and as a product in PROTEIN\_E\_Notch\_activation\_0, mRNA\_E\_Notch\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Notch} = v_{217} + v_{490} - v_{218} - v_{219} \quad (1900)$$

## 8.233 Species PROTEIN\_E\_Notch2

**Name** PROTEIN\_E\_Notch2

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_Notch\_activation\_0, PROTEIN\_E\_SuHN\_association\_0 and as a product in PROTEIN\_E\_Notch\_inactivation\_0, PROTEIN\_E\_SuHN\_dissociation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Notch2} = v_{219} + v_{232} - v_{217} - v_{231} \quad (1901)$$

## 8.234 Species PROTEIN\_E\_Nrl

**Name** PROTEIN\_E\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_Nrl\_degradation\_0 and as a product in mRNA\_E\_Nrl\_translation\_0 and as a modifier in PROTEIN\_E\_Delta\_activation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Nrl} = v_{492} - v_{220} \quad (1902)$$

## 8.235 Species PROTEIN\_E\_OrCt

**Name** PROTEIN\_E\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_OrCt\_degradation\_0 and as a product in mRNA\_E\_OrCt\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_OrCt} = v_{494} - v_{221} \quad (1903)$$

## 8.236 Species PROTEIN\_E\_Otx

**Name** PROTEIN\_E\_Otx

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in eleven reactions (as a reactant in `PROTEIN_E_Otx_degradation_0` and as a product in `mRNA_E_Otx_translation_0` and as a modifier in `GENE_E_Blimp1_transcription_0`, `GENE_E_Bra_transcription_0`, `GENE_E_Endo16_transcription_0`, `GENE_E_FoxA_transcription_0`, `GENE_E_GataE_transcription_0`, `GENE_E_Hox_transcription_0`, `GENE_E_Lim_transcription_0`, `GENE_E_Otx_transcription_0`, `GENE_E_Pmar1_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Otx} = v_{496} - v_{222} \quad (1904)$$

## 8.237 Species PROTEIN\_E\_Pks

**Name** PROTEIN\_E\_Pks

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_E_Pks_degradation_0` and as a product in `mRNA_E_Pks_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Pks} = v_{498} - v_{223} \quad (1905)$$

## 8.238 Species PROTEIN\_E\_Pmar1

**Name** PROTEIN\_E\_Pmar1

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in `PROTEIN_E_Pmar1_degradation_0` and as a product in `mRNA_E_Pmar1_translation_0` and as a modifier in `GENE_E_HesC_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Pmar1} = v_{500} - v_{224} \quad (1906)$$

## 8.239 Species PROTEIN\_E\_Sm27

**Name** PROTEIN\_E\_Sm27

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_E_Sm27_degradation_0` and as a product in `mRNA_E_Sm27_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_E\_Sm27} = v_{502} - v_{225} \quad (1907)$$

## 8.240 Species PROTEIN\_E\_Sm30

**Name** PROTEIN\_E\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_Sm30\_degradation\_0 and as a product in mRNA\_E\_Sm30\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Sm30} = v_{504} - v_{226} \quad (1908)$$

## 8.241 Species PROTEIN\_E\_Sm50

**Name** PROTEIN\_E\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_Sm50\_degradation\_0 and as a product in mRNA\_E\_Sm50\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Sm50} = v_{506} - v_{227} \quad (1909)$$

## 8.242 Species PROTEIN\_E\_Snail

**Name** PROTEIN\_E\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_Snail\_degradation\_0 and as a product in mRNA\_E\_Snail\_translation\_0 and as a modifier in GENE\_E\_Gcad\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Snail} = v_{508} - v_{228} \quad (1910)$$

## 8.243 Species PROTEIN\_E\_SoxB1

**Name** PROTEIN\_E\_SoxB1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_SoxB1\_degradation\_0 and as a product in mRNA\_E\_SoxB1\_translation\_0 and as a modifier in GENE\_E\_CyP\_transcription\_0, GENE\_E\_SoxB1\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_SoxB1} = v_{510} - v_{229} \quad (1911)$$

## 8.244 Species PROTEIN\_E\_SoxC

**Name** PROTEIN\_E\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_SoxC\_degradation\_0 and as a product in mRNA\_E\_SoxC\_translation\_0 and as a modifier in GENE\_E\_SoxC\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_SoxC} = \boxed{v_{512}} - \boxed{v_{230}} \quad (1912)$$

## 8.245 Species PROTEIN\_E\_SuH

**Name** PROTEIN\_E\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_SuHN\_accociation\_0, PROTEIN\_E\_SuH\_degradation\_0 and as a product in PROTEIN\_E\_SuHN\_dissociation\_0, mRNA\_E\_SuH\_translation\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_SuH} = \boxed{v_{232}} + \boxed{v_{514}} - \boxed{v_{231}} - \boxed{v_{233}} \quad (1913)$$

## 8.246 Species PROTEIN\_E\_SuHN

**Name** PROTEIN\_E\_SuHN

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_SuHN\_dissociation\_0 and as a product in PROTEIN\_E\_SuHN\_accociation\_0 and as a modifier in GENE\_E\_GataE\_transcription\_0, GENE\_E\_Gcm\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_SuHN} = \boxed{v_{231}} - \boxed{v_{232}} \quad (1914)$$

## 8.247 Species PROTEIN\_E\_SuTx

**Name** PROTEIN\_E\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_SuTx\_degradation\_0 and as a product in mRNA\_E\_SuTx\_translation\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_SuTx} = \boxed{v_{516}} - \boxed{v_{234}} \quad (1915)$$

## 8.248 Species PROTEIN\_E\_TBr

**Name** PROTEIN\_E\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_E\_TBr\_degradation\_0 and as a product in mRNA\_E\_TBr\_translation\_0 and as a modifier in GENE\_E\_Erg\_transcription\_0, GENE\_E\_FoxB\_transcription\_0, GENE\_E\_Msp130\_transcription\_0, GENE\_E\_Nrl\_transcription\_0, GENE\_E\_TBr\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_TBr} = v_{518} - v_{235} \quad (1916)$$

## 8.249 Species PROTEIN\_E\_TCF

**Name** PROTEIN\_E\_TCF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_E\_GroTCF\_accociation\_0, PROTEIN\_E\_nBTcf\_accociation\_0 and as a product in PROTEIN\_E\_GroTCF\_dissociation\_0, PROTEIN\_E\_nBTcf\_dissociation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_TCF} = v_{207} + v_{251} - v_{206} - v_{250} \quad (1917)$$

## 8.250 Species PROTEIN\_E\_Tel

**Name** PROTEIN\_E\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in five reactions (as a reactant in PROTEIN\_E\_Tel\_degradation\_0 and as a product in mRNA\_E\_Tel\_translation\_0 and as a modifier in GENE\_E\_Sm27\_transcription\_0, GENE\_E\_Sm50\_transcription\_0, GENE\_E\_Tel\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Tel} = v_{520} - v_{236} \quad (1918)$$

## 8.251 Species PROTEIN\_E\_Tgif

**Name** PROTEIN\_E\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in PROTEIN\_E\_Tgif\_degradation\_0 and as a product in mRNA\_E\_Tgif\_translation\_0 and as a modifier in GENE\_E\_Alx1\_transcription\_0, GENE\_E\_FoxA\_transcription\_0, GENE\_E\_FoxO\_transcription\_0, GENE\_E\_Hex\_transcription\_0, GENE\_E\_Nrl\_transcription\_0, GENE\_E\_Tgif\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_Tgif} = v_{522} - v_{237} \quad (1919)$$

## 8.252 Species PROTEIN\_E\_UMADelta

**Name** PROTEIN\_E\_UMADelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Delta\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UMADelta} = 0 \quad (1920)$$

## 8.253 Species PROTEIN\_E\_UMANrl

**Name** PROTEIN\_E\_UMANrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Nrl\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UMANrl} = 0 \quad (1921)$$

## 8.254 Species PROTEIN\_E\_UMR

**Name** PROTEIN\_E\_UMR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_E\\_UMR\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_UMR\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UMR} = v_{524} - v_{238} \quad (1922)$$

## 8.255 Species PROTEIN\_E\_UVA0tx

**Name** PROTEIN\_E\_UVA0tx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_E\\_UVA0tx\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_UVA0tx\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_Otx\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UVA0tx} = v_{526} - v_{239} \quad (1923)$$

## 8.256 Species PROTEIN\_E\_UbiqAlx1

**Name** PROTEIN\_E\_UbiqAlx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Alx1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqAlx1} = 0 \quad (1924)$$

## 8.257 Species PROTEIN\_E\_UbiqDelta

**Name** PROTEIN\_E\_UbiqDelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Delta\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqDelta} = 0 \quad (1925)$$

## 8.258 Species PROTEIN\_E\_UbiqES

**Name** PROTEIN\_E\_UbiqES

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_ES\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqES} = 0 \quad (1926)$$

## 8.259 Species PROTEIN\_E\_UbiqEts1

**Name** PROTEIN\_E\_UbiqEts1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Ets1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqEts1} = 0 \quad (1927)$$

## 8.260 Species PROTEIN\_E\_UbiqGcad

**Name** PROTEIN\_E\_UbiqGcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Gcad\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqGcad} = 0 \quad (1928)$$

## 8.261 Species PROTEIN\_E\_UbiqHesC

**Name** PROTEIN\_E\_UbiqHesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_HesC\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqHesC} = 0 \quad (1929)$$

## 8.262 Species PROTEIN\_E\_UbiqHnf6

**Name** PROTEIN\_E\_UbiqHnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Hnf6\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqHnf6} = 0 \quad (1930)$$

## 8.263 Species PROTEIN\_E\_UbiqSoxB1

**Name** PROTEIN\_E\_UbiqSoxB1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_E\\_UbiqSoxB1\\_degradation\\_0](#) and as a product in [mRNA\\_E\\_UbiqSoxB1\\_translation\\_0](#) and as a modifier in [GENE\\_E\\_SoxB1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqSoxB1} = v_{528} - v_{240} \quad (1931)$$

## 8.264 Species PROTEIN\_E\_UbiqSoxC

**Name** PROTEIN\_E\_UbiqSoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_SoxC\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqSoxC} = 0 \quad (1932)$$

## 8.265 Species PROTEIN\_E\_UbiqTel

**Name** PROTEIN\_E\_UbiqTel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_E\\_Tel\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_UbiqTel} = 0 \quad (1933)$$

## 8.266 Species PROTEIN\_E\_VEGF

**Name** PROTEIN\_E\_VEGF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in [PROTEIN\\_E\\_VEGFSignal\\_accociation\\_0](#), [PROTEIN\\_E\\_VEGF\\_degradation\\_0](#), [PROTEIN\\_M\\_VEGFSignal\\_accociation\\_0](#), [PROTEIN\\_P\\_VEGFSignal\\_accociation\\_0](#) and as a product in [PROTEIN\\_E\\_VEGFSignal\\_dissociation\\_0](#), [PROTEIN\\_M\\_VEGFSignal\\_dissociation\\_0](#), [PROTEIN\\_P\\_VEGFSignal\\_dissociation\\_0](#), [mRNA\\_E\\_VEGF\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_VEGF} = v_{243} + v_{320} + v_{398} + v_{532} - v_{242} - v_{244} - v_{319} - v_{397} \quad (1934)$$

## 8.267 Species PROTEIN\_E\_VEGFR

**Name** PROTEIN\_E\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [PROTEIN\\_E\\_VEGFR\\_degradation\\_0](#), [PROTEIN\\_E\\_VEGFSignal\\_accociation\\_0](#) and as a product in [PROTEIN\\_E\\_VEGFSignal\\_dissociation\\_0](#), [mRNA\\_E\\_VEGFR\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_VEGFR} = v_{243} + v_{530} - v_{241} - v_{242} \quad (1935)$$

## 8.268 Species PROTEIN\_E\_VEGFSignal

**Name** PROTEIN\_E\_VEGFSignal

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in five reactions (as a reactant in [PROTEIN\\_E\\_VEGFSignal\\_dissociation\\_0](#) and as a product in [PROTEIN\\_E\\_VEGFSignal\\_accociation\\_0](#) and as a modifier in [GENE\\_E\\_MspL\\_transcription\\_0](#), [GENE\\_E\\_Sm30\\_transcription\\_0](#), [GENE\\_E\\_Sm50\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_E\_VEGFSignal} = v_{242} - v_{243} \quad (1936)$$

## 8.269 Species PROTEIN\_E\_Wnt8

**Name** PROTEIN\_E\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_Wnt8\_degradation\_0 and as a product in mRNA\_E\_Wnt8\_translation\_0 and as a modifier in PROTEIN\_E\_frizzled\_a\_activation\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_Wnt8} = v_{534} - v_{245} \quad (1937)$$

## 8.270 Species PROTEIN\_E\_cB

**Name** PROTEIN\_E\_cB

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in five reactions (as a reactant in PROTEIN\_E\_cB\_a\_degradation\_0, PROTEIN\_E\_cB\_degradation\_0, PROTEIN\_E\_nTCF\_association\_0 and as a product in PROTEIN\_E\_nTCF\_dissociation\_0, mRNA\_E\_cB\_translation\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_cB} = v_{251} + v_{536} - v_{246} - v_{247} - v_{250} \quad (1938)$$

## 8.271 Species PROTEIN\_E\_frizzled\_a

**Name** PROTEIN\_E\_frizzled\_a

**Initial concentration** 20 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_E\_frizzled\_a\_inactivation\_0 and as a product in PROTEIN\_E\_frizzled\_a\_activation\_0 and as a modifier in PROTEIN\_E\_GSK3\_i\_activation\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_frizzled\_a} = v_{248} - v_{249} \quad (1939)$$

## 8.272 Species PROTEIN\_E\_frizzled\_i

**Name** PROTEIN\_E\_frizzled\_i

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_frizzled\_a\_activation\_0 and as a product in PROTEIN\_E\_frizzled\_a\_inactivation\_0).

$$\frac{d}{dt}\text{PROTEIN\_E\_frizzled\_i} = v_{249} - v_{248} \quad (1940)$$

## 8.273 Species PROTEIN\_E\_nBTCF

**Name** PROTEIN\_E\_nBTCF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in twelve reactions (as a reactant in PROTEIN\_E\_nBTCF\_dissociation\_0 and as a product in PROTEIN\_E\_nBTCF\_association\_0 and as a modifier in GENE\_E\_Blimp1\_transcription\_0, GENE\_E\_Bra\_transcription\_0, GENE\_E\_Eve\_transcription\_0, GENE\_E\_FoxA\_transcription\_0, GENE\_E\_FoxN23\_transcription\_0, GENE\_E\_Gcm\_transcription\_0, GENE\_E\_Hox\_transcription\_0, GENE\_E\_Pmar1\_transcription\_0, GENE\_E\_Wnt8\_transcription\_0, GENE\_E\_z13\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_nBTCF} = v_{250} - v_{251} \quad (1941)$$

## 8.274 Species PROTEIN\_E\_z13

**Name** PROTEIN\_E\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_E\_z13\_degradation\_0 and as a product in mRNA\_E\_z13\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_E\_z13} = v_{538} - v_{252} \quad (1942)$$

## 8.275 Species PROTEIN\_GCM

**Name** PROTEIN\_GCM

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a modifier in GENE\_E\_GataC\_transcription\_0, GENE\_M\_GataC\_transcription\_0, GENE\_P\_GataC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_GCM} = 0 \quad (1943)$$

## 8.276 Species PROTEIN\_M\_Alx1

**Name** PROTEIN\_M\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in PROTEIN\_M\_Alx1\_degradation\_0 and as a product in mRNA\_M\_Alx1\_translation\_0 and as a modifier in GENE\_M\_Dri\_transcription\_0, GENE\_M\_FoxB\_transcription\_0, GENE\_M\_Gcm\_transcription\_0, GENE\_M\_Msp130\_transcription\_0, GENE\_M\_MspL\_transcription\_0, GENE\_M\_Sm27\_transcription\_0, GENE\_M\_Sm50\_transcription\_0, GENE\_M\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Alx1} = v_{540} - v_{253} \quad (1944)$$

### 8.277 Species PROTEIN\_M\_Apobec

**Name** PROTEIN\_M\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_Apobec\_degradation\_0 and as a product in mRNA\_M\_Apobec\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Apobec} = v_{542} - v_{254} \quad (1945)$$

### 8.278 Species PROTEIN\_M\_Blimp1

**Name** PROTEIN\_M\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_M\_Blimp1\_degradation\_0 and as a product in mRNA\_M\_Blimp1\_translation\_0 and as a modifier in GENE\_M\_Blimp1\_transcription\_0, GENE\_M\_Eve\_transcription\_0, GENE\_M\_Hox\_transcription\_0, GENE\_M\_Otx\_transcription\_0, GENE\_M\_Wnt8\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Blimp1} = v_{544} - v_{255} \quad (1946)$$

### 8.279 Species PROTEIN\_M\_Bra

**Name** PROTEIN\_M\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_M\_Bra\_degradation\_0 and as a product in mRNA\_M\_Bra\_translation\_0 and as a modifier in GENE\_M\_Apobec\_transcription\_0, GENE\_M\_FoxA\_transcription\_0, GENE\_M\_Gelsolin\_transcription\_0, GENE\_M\_Kakapo\_transcription\_0, GENE\_M\_OrCt\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Bra} = v_{546} - v_{256} \quad (1947)$$

## 8.280 Species PROTEIN\_M\_Brn

**Name** PROTEIN\_M\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_Brn\_degradation\_0 and as a product in mRNA\_M\_Brn\_translation\_0 and as a modifier in GENE\_M\_Blimp1\_transcription\_0, GENE\_M\_Endo16\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Brn} = v_{548} - v_{257} \quad (1948)$$

## 8.281 Species PROTEIN\_M\_CAPK

**Name** PROTEIN\_M\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_CAPK\_degradation\_0 and as a product in mRNA\_M\_CAPK\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_CAPK} = v_{550} - v_{258} \quad (1949)$$

## 8.282 Species PROTEIN\_M\_CyP

**Name** PROTEIN\_M\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_CyP\_degradation\_0 and as a product in mRNA\_M\_CyP\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_CyP} = v_{552} - v_{259} \quad (1950)$$

## 8.283 Species PROTEIN\_M\_Delta

**Name** PROTEIN\_M\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_Delta\_degradation\_0, PROTEIN\_M\_Delta\_inactivation\_0 and as a product in PROTEIN\_M\_Delta\_activation\_0, mRNA\_M\_Delta\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Delta} = v_{260} + v_{554} - v_{261} - v_{262} \quad (1951)$$

## 8.284 Species PROTEIN\_M\_Delta2

**Name** PROTEIN\_M\_Delta2

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_Delta\_activation\_0 and as a product in PROTEIN\_M\_Delta\_inactivation\_0 and as a modifier in PROTEIN\_M\_Notch\_activation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Delta2} = v_{262} - v_{260} \quad (1952)$$

## 8.285 Species PROTEIN\_M\_Dpt

**Name** PROTEIN\_M\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_Dpt\_degradation\_0 and as a product in mRNA\_M\_Dpt\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Dpt} = v_{556} - v_{263} \quad (1953)$$

## 8.286 Species PROTEIN\_M\_Dri

**Name** PROTEIN\_M\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_M\_Dri\_degradation\_0 and as a product in mRNA\_M\_Dri\_translation\_0 and as a modifier in GENE\_M\_CyP\_transcription\_0, GENE\_M\_FoxB\_transcription\_0, GENE\_M\_Sm27\_transcription\_0, GENE\_M\_Sm50\_transcription\_0, GENE\_M\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Dri} = v_{558} - v_{264} \quad (1954)$$

## 8.287 Species PROTEIN\_M\_Endo16

**Name** PROTEIN\_M\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_Endo16\_degradation\_0 and as a product in mRNA\_M\_Endo16\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Endo16} = v_{560} - v_{265} \quad (1955)$$

## 8.288 Species PROTEIN\_M\_Erg

**Name** PROTEIN\_M\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in PROTEIN\_M\_Erg\_degradation\_0 and as a product in mRNA\_M\_Erg\_translation\_0 and as a modifier in GENE\_M\_Ficolin\_transcription\_0, GENE\_M\_FoxO\_transcription\_0, GENE\_M\_Hex\_transcription\_0, GENE\_M\_Msp130\_transcription\_0, GENE\_M\_MspL\_transcription\_0, GENE\_M\_Sm27\_transcription\_0, GENE\_M\_Sm50\_transcription\_0, GENE\_M\_Tgif\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Erg} = v_{562} - v_{266} \quad (1956)$$

## 8.289 Species PROTEIN\_M\_Ets1

**Name** PROTEIN\_M\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 18 reactions (as a reactant in PROTEIN\_M\_Ets1\_degradation\_0 and as a product in mRNA\_M\_Ets1\_translation\_0 and as a modifier in GENE\_M\_Alx1\_transcription\_0, GENE\_M\_CyP\_transcription\_0, GENE\_M\_Delta\_transcription\_0, GENE\_M\_Dri\_transcription\_0, GENE\_M\_Erg\_transcription\_0, GENE\_M\_Ficolin\_transcription\_0, GENE\_M\_FoxB\_transcription\_0, GENE\_M\_FoxO\_transcription\_0, GENE\_M\_Hex\_transcription\_0, GENE\_M\_Msp130\_transcription\_0, GENE\_M\_MspL\_transcription\_0, GENE\_M\_Sm27\_transcription\_0, GENE\_M\_Sm50\_transcription\_0, GENE\_M\_TBr\_transcription\_0, GENE\_M\_Tgif\_transcription\_0, GENE\_M\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Ets1} = v_{564} - v_{267} \quad (1957)$$

## 8.290 Species PROTEIN\_M\_Eve

**Name** PROTEIN\_M\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_Eve\_degradation\_0 and as a product in mRNA\_M\_Eve\_translation\_0 and as a modifier in GENE\_M\_Blimp1\_transcription\_0, GENE\_M\_Hox\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Eve} = v_{566} - v_{268} \quad (1958)$$

## 8.291 Species PROTEIN\_M\_Ficolin

**Name** PROTEIN\_M\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_Ficolin\_degradation\_0 and as a product in mRNA\_M\_Ficolin\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Ficolin} = v_{568} - v_{269} \quad (1959)$$

## 8.292 Species PROTEIN\_M\_FoxA

**Name** PROTEIN\_M\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_FoxA\_degradation\_0 and as a product in mRNA\_M\_FoxA\_translation\_0 and as a modifier in GENE\_M\_FoxA\_transcription\_0, GENE\_M\_Gcm\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_FoxA} = v_{570} - v_{270} \quad (1960)$$

## 8.293 Species PROTEIN\_M\_FoxB

**Name** PROTEIN\_M\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_FoxB\_degradation\_0 and as a product in mRNA\_M\_FoxB\_translation\_0 and as a modifier in GENE\_M\_FoxB\_transcription\_0, GENE\_M\_Msp130\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_FoxB} = v_{572} - v_{271} \quad (1961)$$

## 8.294 Species PROTEIN\_M\_FoxN23

**Name** PROTEIN\_M\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_FoxN23\_degradation\_0 and as a product in mRNA\_M\_FoxN23\_translation\_0 and as a modifier in GENE\_M\_Nrl\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_FoxN23} = v_{574} - v_{272} \quad (1962)$$

## 8.295 Species PROTEIN\_M\_FoxO

**Name** PROTEIN\_M\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_FoxO\_degradation\_0 and as a product in mRNA\_M\_FoxO\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_FoxO} = v_{576} - v_{273} \quad (1963)$$

## 8.296 Species PROTEIN\_M\_FvMo

**Name** PROTEIN\_M\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_FvMo\_degradation\_0 and as a product in mRNA\_M\_FvMo\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_FvMo} = v_{578} - v_{274} \quad (1964)$$

## 8.297 Species PROTEIN\_M\_GSK3\_a

**Name** PROTEIN\_M\_GSK3\_a

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_GSK3\_i\_activation\_0 and as a product in PROTEIN\_M\_GSK3\_i\_inactivation\_0 and as a modifier in PROTEIN\_M\_cB\_a\_degradation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_GSK3\_a} = v_{276} - v_{275} \quad (1965)$$

## 8.298 Species PROTEIN\_M\_GSK3\_i

**Name** PROTEIN\_M\_GSK3\_i

**Initial concentration** 20 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_GSK3\_i\_inactivation\_0 and as a product in PROTEIN\_M\_GSK3\_i\_activation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_GSK3\_i} = v_{275} - v_{276} \quad (1966)$$

## 8.299 Species PROTEIN\_M\_GataC

**Name** PROTEIN\_M\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_M\\_GataC\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_GataC\\_translation\\_0](#) and as a modifier in [GENE\\_M\\_GataC\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_GataC} = v_{580} - v_{277} \quad (1967)$$

## 8.300 Species PROTEIN\_M\_GataE

**Name** PROTEIN\_M\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 14 reactions (as a reactant in [PROTEIN\\_M\\_GataE\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_GataE\\_translation\\_0](#) and as a modifier in [GENE\\_M\\_Blimp1\\_transcription\\_0](#), [GENE\\_M\\_Bra\\_transcription\\_0](#), [GENE\\_M\\_Brn\\_transcription\\_0](#), [GENE\\_M\\_FoxA\\_transcription\\_0](#), [GENE\\_M\\_FvMo\\_transcription\\_0](#), [GENE\\_M\\_GataC\\_transcription\\_0](#), [GENE\\_M\\_Lim\\_transcription\\_0](#), [GENE\\_M\\_Not\\_transcription\\_0](#), [GENE\\_M\\_Nrl\\_transcription\\_0](#), [GENE\\_M\\_Otx\\_transcription\\_0](#), [GENE\\_M\\_Pks\\_transcription\\_0](#), [GENE\\_M\\_SuTx\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_GataE} = v_{582} - v_{278} \quad (1968)$$

## 8.301 Species PROTEIN\_M\_Gcad

**Name** PROTEIN\_M\_Gcad

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_Gcad\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Gcad\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Gcad} = v_{584} - v_{279} \quad (1969)$$

## 8.302 Species PROTEIN\_M\_Gcm

**Name** PROTEIN\_M\_Gcm

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in `PROTEIN_M_Gcm_degradation_0` and as a product in `mRNA_M_Gcm_translation_0` and as a modifier in `GENE_M_Alx1_transcription_0`, `GENE_M_Dpt_transcription_0`, `GENE_M_FvMo_transcription_0`, `GENE_M_Gcm_transcription_0`, `GENE_M_Pks_transcription_0`, `GENE_M_SuTx_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Gcm} = v_{586} - v_{280} \quad (1970)$$

### 8.303 Species PROTEIN\_M\_Gelsolin

**Name** PROTEIN\_M\_Gelsolin

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_M_Gelsolin_degradation_0` and as a product in `mRNA_M_Gelsolin_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Gelsolin} = v_{588} - v_{281} \quad (1971)$$

### 8.304 Species PROTEIN\_M\_Gro

**Name** PROTEIN\_M\_Gro

**Initial concentration**  $30 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_M_GroTCF_accociation_0` and as a product in `PROTEIN_M_GroTCF_dissociation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Gro} = v_{283} - v_{282} \quad (1972)$$

### 8.305 Species PROTEIN\_M\_GroTCF

**Name** PROTEIN\_M\_GroTCF

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in ten reactions (as a reactant in `PROTEIN_M_GroTCF_dissociation_0` and as a product in `PROTEIN_M_GroTCF_accociation_0` and as a modifier in `GENE_M_Blimp1_transcription_0`, `GENE_M_Bra_transcription_0`, `GENE_M_Eve_transcription_0`, `GENE_M_Gcm_transcription_0`, `GENE_M_Hox_transcription_0`, `GENE_M_Pmar1_transcription_0`, `GENE_M_Wnt8_transcription_0`, `GENE_M_z13_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_GroTCF} = v_{282} - v_{283} \quad (1973)$$

### 8.306 Species PROTEIN\_M\_GroTFC

**Name** PROTEIN\_M\_GroTFC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in GENE\_M\_FoxA\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_GroTFC} = 0 \quad (1974)$$

### 8.307 Species PROTEIN\_M\_HesC

**Name** PROTEIN\_M\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in nine reactions (as a reactant in PROTEIN\_M\_HesC\_degradation\_0 and as a product in mRNA\_M\_HesC\_translation\_0 and as a modifier in GENE\_M\_Alx1\_transcription\_0, GENE\_M\_Delta\_transcription\_0, GENE\_M\_Ets1\_transcription\_0, GENE\_M\_Nrl\_transcription\_0, GENE\_M\_SoxC\_transcription\_0, GENE\_M\_TBr\_transcription\_0, GENE\_M\_Tel\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_HesC} = v_{590} - v_{284} \quad (1975)$$

### 8.308 Species PROTEIN\_M\_Hex

**Name** PROTEIN\_M\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in twelve reactions (as a reactant in PROTEIN\_M\_Hex\_degradation\_0 and as a product in mRNA\_M\_Hex\_translation\_0 and as a modifier in GENE\_M\_Erg\_transcription\_0, GENE\_M\_Ficolin\_transcription\_0, GENE\_M\_FoxO\_transcription\_0, GENE\_M\_Msp130\_transcription\_0, GENE\_M\_MspL\_transcription\_0, GENE\_M\_Sm27\_transcription\_0, GENE\_M\_Sm50\_transcription\_0, GENE\_M\_Snail\_transcription\_0, GENE\_M\_Tgif\_transcription\_0, GENE\_M\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Hex} = v_{592} - v_{285} \quad (1976)$$

### 8.309 Species PROTEIN\_M\_Hnf6

**Name** PROTEIN\_M\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in [PROTEIN\\_M\\_Hnf6\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Hnf6\\_translation\\_0](#) and as a modifier in [GENE\\_M\\_Ficolin\\_transcription\\_0](#), [GENE\\_M\\_GataC\\_transcription\\_0](#), [GENE\\_M\\_Msp130\\_transcription\\_0](#), [GENE\\_M\\_Sm27\\_transcription\\_0](#), [GENE\\_M\\_Sm50\\_transcription\\_0](#), [GENE\\_M\\_z13\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Hnf6} = v_{594} - v_{286} \quad (1977)$$

### [8.310 Species PROTEIN\\_M\\_Hox](#)

**Name** PROTEIN\_M\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in six reactions (as a reactant in [PROTEIN\\_M\\_Hox\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Hox\\_translation\\_0](#) and as a modifier in [GENE\\_M\\_Apobec\\_transcription\\_0](#), [GENE\\_M\\_Eve\\_transcription\\_0](#), [GENE\\_M\\_GataE\\_transcription\\_0](#), [GENE\\_M\\_OrCt\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Hox} = v_{596} - v_{287} \quad (1978)$$

### [8.311 Species PROTEIN\\_M\\_Kakapo](#)

**Name** PROTEIN\_M\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_Kakapo\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Kakapo\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Kakapo} = v_{598} - v_{288} \quad (1979)$$

### [8.312 Species PROTEIN\\_M\\_L1](#)

**Name** PROTEIN\_M\_L1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_VEGFSignal\\_accociation\\_0](#) and as a product in [PROTEIN\\_M\\_VEGFSignal\\_dissociation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_L1} = v_{320} - v_{319} \quad (1980)$$

### 8.313 Species PROTEIN\_M\_Lim

**Name** PROTEIN\_M\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_Lim\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Lim\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Lim} = v_{600} - v_{289} \quad (1981)$$

### 8.314 Species PROTEIN\_M\_Msp130

**Name** PROTEIN\_M\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_Msp130\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Msp130\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Msp130} = v_{602} - v_{290} \quad (1982)$$

### 8.315 Species PROTEIN\_M\_MspL

**Name** PROTEIN\_M\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_MspL\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_MspL\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_MspL} = v_{604} - v_{291} \quad (1983)$$

### 8.316 Species PROTEIN\_M\_Not

**Name** PROTEIN\_M\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_Not\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Not\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Not} = v_{606} - v_{292} \quad (1984)$$

### 8.317 Species PROTEIN\_M\_Notch

**Name** PROTEIN\_M\_Notch

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in four reactions (as a reactant in `PROTEIN_M_Notch_degradation_0`, `PROTEIN_M_Notch_inactivation_0` and as a product in `PROTEIN_M_Notch_activation_0`, `mRNA_M_Notch_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Notch} = v_{293} + v_{608} - v_{294} - v_{295} \quad (1985)$$

### 8.318 Species PROTEIN\_M\_Notch2

**Name** PROTEIN\_M\_Notch2

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in four reactions (as a reactant in `PROTEIN_M_Notch_activation_0`, `PROTEIN_M_SuHN_association_0` and as a product in `PROTEIN_M_Notch_inactivation_0`, `PROTEIN_M_SuHN_dissociation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Notch2} = v_{295} + v_{308} - v_{293} - v_{307} \quad (1986)$$

### 8.319 Species PROTEIN\_M\_Nrl

**Name** PROTEIN\_M\_Nrl

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in `PROTEIN_M_Nrl_degradation_0` and as a product in `mRNA_M_Nrl_translation_0` and as a modifier in `PROTEIN_M_Delta_activation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Nrl} = v_{610} - v_{296} \quad (1987)$$

### 8.320 Species PROTEIN\_M\_OrCt

**Name** PROTEIN\_M\_OrCt

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_M_OrCt_degradation_0` and as a product in `mRNA_M_OrCt_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_OrCt} = v_{612} - v_{297} \quad (1988)$$

### 8.321 Species PROTEIN\_M\_Otx

**Name** PROTEIN\_M\_Otx

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in eleven reactions (as a reactant in `PROTEIN_M_Otx_degradation_0` and as a product in `mRNA_M_Otx_translation_0` and as a modifier in `GENE_M_Blimp1_transcription_0`, `GENE_M_Bra_transcription_0`, `GENE_M_Endo16_transcription_0`, `GENE_M_FoxA_transcription_0`, `GENE_M_GataE_transcription_0`, `GENE_M_Hox_transcription_0`, `GENE_M_Lim_transcription_0`, `GENE_M_Otx_transcription_0`, `GENE_M_Pmar1_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Otx} = v_{614} - v_{298} \quad (1989)$$

### 8.322 Species PROTEIN\_M\_Pks

**Name** PROTEIN\_M\_Pks

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_M_Pks_degradation_0` and as a product in `mRNA_M_Pks_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Pks} = v_{616} - v_{299} \quad (1990)$$

### 8.323 Species PROTEIN\_M\_Pmar1

**Name** PROTEIN\_M\_Pmar1

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in `PROTEIN_M_Pmar1_degradation_0` and as a product in `mRNA_M_Pmar1_translation_0` and as a modifier in `GENE_M_HesC_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Pmar1} = v_{618} - v_{300} \quad (1991)$$

### 8.324 Species PROTEIN\_M\_Sm27

**Name** PROTEIN\_M\_Sm27

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_M_Sm27_degradation_0` and as a product in `mRNA_M_Sm27_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_M\_Sm27} = v_{620} - v_{301} \quad (1992)$$

### 8.325 Species PROTEIN\_M\_Sm30

**Name** PROTEIN\_M\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_Sm30\_degradation\_0 and as a product in mRNA\_M\_Sm30\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Sm30} = v_{622} - v_{302} \quad (1993)$$

### 8.326 Species PROTEIN\_M\_Sm50

**Name** PROTEIN\_M\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_Sm50\_degradation\_0 and as a product in mRNA\_M\_Sm50\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Sm50} = v_{624} - v_{303} \quad (1994)$$

### 8.327 Species PROTEIN\_M\_Snail

**Name** PROTEIN\_M\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_Snail\_degradation\_0 and as a product in mRNA\_M\_Snail\_translation\_0 and as a modifier in GENE\_M\_Gcad\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_Snail} = v_{626} - v_{304} \quad (1995)$$

### 8.328 Species PROTEIN\_M\_SoxB1

**Name** PROTEIN\_M\_SoxB1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_SoxB1\_degradation\_0 and as a product in mRNA\_M\_SoxB1\_translation\_0 and as a modifier in GENE\_M\_CyP\_transcription\_0, GENE\_M\_SoxB1\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_SoxB1} = v_{628} - v_{305} \quad (1996)$$

### 8.329 Species PROTEIN\_M\_SoxC

**Name** PROTEIN\_M\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_SoxC\_degradation\_0 and as a product in mRNA\_M\_SoxC\_translation\_0 and as a modifier in GENE\_M\_SoxC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_SoxC} = v_{630} - v_{306} \quad (1997)$$

### 8.330 Species PROTEIN\_M\_SuH

**Name** PROTEIN\_M\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_SuHN\_accociation\_0, PROTEIN\_M\_SuH\_degradation\_0 and as a product in PROTEIN\_M\_SuHN\_dissociation\_0, mRNA\_M\_SuH\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_SuH} = v_{308} + v_{632} - v_{307} - v_{309} \quad (1998)$$

### 8.331 Species PROTEIN\_M\_SuHN

**Name** PROTEIN\_M\_SuHN

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_SuHN\_dissociation\_0 and as a product in PROTEIN\_M\_SuHN\_accociation\_0 and as a modifier in GENE\_M\_GataE\_transcription\_0, GENE\_M\_Gcm\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_SuHN} = v_{307} - v_{308} \quad (1999)$$

### 8.332 Species PROTEIN\_M\_SuTx

**Name** PROTEIN\_M\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_SuTx\_degradation\_0 and as a product in mRNA\_M\_SuTx\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_SuTx} = v_{634} - v_{310} \quad (2000)$$

### 8.333 Species PROTEIN\_M\_TBr

**Name** PROTEIN\_M\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_M\_TBr\_degradation\_0 and as a product in mRNA\_M\_TBr\_translation\_0 and as a modifier in GENE\_M\_Erg\_transcription\_0, GENE\_M\_FoxB\_transcription\_0, GENE\_M\_Msp130\_transcription\_0, GENE\_M\_Nrl\_transcription\_0, GENE\_M\_TBr\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_M\_TBr} = v_{636} - v_{311} \quad (2001)$$

### 8.334 Species PROTEIN\_M\_TCF

**Name** PROTEIN\_M\_TCF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_M\_GroTCF\_accociation\_0, PROTEIN\_M\_nBTcf\_accociation\_0 and as a product in PROTEIN\_M\_GroTCF\_dissociation\_0, PROTEIN\_M\_nBTcf\_dissociation\_0).

$$\frac{d}{dt}\text{PROTEIN\_M\_TCF} = v_{283} + v_{327} - v_{282} - v_{326} \quad (2002)$$

### 8.335 Species PROTEIN\_M\_Tel

**Name** PROTEIN\_M\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in five reactions (as a reactant in PROTEIN\_M\_Tel\_degradation\_0 and as a product in mRNA\_M\_Tel\_translation\_0 and as a modifier in GENE\_M\_Sm27\_transcription\_0, GENE\_M\_Sm50\_transcription\_0, GENE\_M\_Tel\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_M\_Tel} = v_{638} - v_{312} \quad (2003)$$

### 8.336 Species PROTEIN\_M\_Tgif

**Name** PROTEIN\_M\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in PROTEIN\_M\_Tgif\_degradation\_0 and as a product in mRNA\_M\_Tgif\_translation\_0 and as a modifier in GENE\_M\_Alx1\_transcription\_0, GENE\_M\_FoxA\_transcription\_0, GENE\_M\_FoxO\_transcription\_0, GENE\_M\_Hex\_transcription\_0, GENE\_M\_Nrl\_transcription\_0, GENE\_M\_Tgif\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_M\_Tgif} = v_{640} - v_{313} \quad (2004)$$

### 8.337 Species PROTEIN\_M\_UMADelta

**Name** PROTEIN\_M\_UMADelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_UMADelta\_degradation\_0 and as a product in mRNA\_M\_UMADelta\_translation\_0 and as a modifier in GENE\_M\_Delta\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_UMADelta} = v_{642} - v_{314} \quad (2005)$$

### 8.338 Species PROTEIN\_M\_UMANrl

**Name** PROTEIN\_M\_UMANrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_M\_UMANrl\_degradation\_0 and as a product in mRNA\_M\_UMANrl\_translation\_0 and as a modifier in GENE\_M\_Nrl\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_UMANrl} = v_{644} - v_{315} \quad (2006)$$

### 8.339 Species PROTEIN\_M\_UMR

**Name** PROTEIN\_M\_UMR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_UMR\_degradation\_0 and as a product in mRNA\_M\_UMR\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_UMR} = v_{646} - v_{316} \quad (2007)$$

### 8.340 Species PROTEIN\_M\_UVAOtx

**Name** PROTEIN\_M\_UVAOtx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in GENE\_M\_Otx\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_UVAOtx} = 0 \quad (2008)$$

### 8.341 Species PROTEIN\_M\_UbiqAlx1

**Name** PROTEIN\_M\_UbiqAlx1

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_Alx1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqAlx1} = 0 \quad (2009)$$

### 8.342 Species PROTEIN\_M\_UbiqDelta

**Name** PROTEIN\_M\_UbiqDelta

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_Delta\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqDelta} = 0 \quad (2010)$$

### 8.343 Species PROTEIN\_M\_UbiqES

**Name** PROTEIN\_M\_UbiqES

**Initial concentration** 0 mol · l<sup>-1</sup>

This species does not take part in any reactions. Its quantity does hence not change over time:

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqES} = 0 \quad (2011)$$

### 8.344 Species PROTEIN\_M\_UbiqEts1

**Name** PROTEIN\_M\_UbiqEts1

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_Ets1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqEts1} = 0 \quad (2012)$$

### 8.345 Species PROTEIN\_M\_UbiqGcad

**Name** PROTEIN\_M\_UbiqGcad

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_Gcad\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqGcad} = 0 \quad (2013)$$

### 8.346 Species PROTEIN\_M\_UbiqHesC

**Name** PROTEIN\_M\_UbiqHesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_HesC\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqHesC} = 0 \quad (2014)$$

### 8.347 Species PROTEIN\_M\_UbiqHnf6

**Name** PROTEIN\_M\_UbiqHnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_Hnf6\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqHnf6} = 0 \quad (2015)$$

### 8.348 Species PROTEIN\_M\_UbiqSoxB1

**Name** PROTEIN\_M\_UbiqSoxB1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_M\\_UbiqSoxB1\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_UbiqSoxB1\\_translation\\_0](#) and as a modifier in [GENE\\_M\\_SoxB1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqSoxB1} = v_{648} - v_{317} \quad (2016)$$

### 8.349 Species PROTEIN\_M\_UbiqSoxC

**Name** PROTEIN\_M\_UbiqSoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_SoxC\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqSoxC} = 0 \quad (2017)$$

### 8.350 Species PROTEIN\_M\_UbiqTel

**Name** PROTEIN\_M\_UbiqTel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_M\\_Tel\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_UbiqTel} = 0 \quad (2018)$$

### 8.351 Species PROTEIN\_M\_VEGFR

**Name** PROTEIN\_M\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [PROTEIN\\_M\\_VEGFR\\_degradation\\_0](#), [PROTEIN\\_M\\_VEGFSignal\\_accociation\\_0](#) and as a product in [PROTEIN\\_M\\_VEGFSignal\\_dissociation\\_0](#), [mRNA\\_M\\_VEGFR\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_VEGFR} = v_{320} + v_{650} - v_{318} - v_{319} \quad (2019)$$

### 8.352 Species PROTEIN\_M\_VEGFSignal

**Name** PROTEIN\_M\_VEGFSignal

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in five reactions (as a reactant in [PROTEIN\\_M\\_VEGFSignal\\_dissociation\\_0](#) and as a product in [PROTEIN\\_M\\_VEGFSignal\\_accociation\\_0](#) and as a modifier in [GENE\\_M\\_MspL\\_transcription\\_0](#), [GENE\\_M\\_Sm30\\_transcription\\_0](#), [GENE\\_M\\_Sm50\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_VEGFSignal} = v_{319} - v_{320} \quad (2020)$$

### 8.353 Species PROTEIN\_M\_Wnt8

**Name** PROTEIN\_M\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_M\\_Wnt8\\_degradation\\_0](#) and as a product in [mRNA\\_M\\_Wnt8\\_translation\\_0](#) and as a modifier in [PROTEIN\\_M\\_frizzled\\_a\\_activation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_Wnt8} = v_{652} - v_{321} \quad (2021)$$

### 8.354 Species PROTEIN\_M\_cB

**Name** PROTEIN\_M\_cB

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in five reactions (as a reactant in [PROTEIN\\_M\\_cB\\_a\\_degradation\\_0](#), [PROTEIN\\_M\\_cB\\_degradation\\_0](#), [PROTEIN\\_M\\_nBTcf\\_accociation\\_0](#) and as a product in [PROTEIN\\_M\\_nBTcf\\_dissociation\\_0](#), [mRNA\\_M\\_cB\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_cB} = v_{327} + v_{654} - v_{322} - v_{323} - v_{326} \quad (2022)$$

### 8.355 Species PROTEIN\_M\_frizzled\_a

**Name** PROTEIN\_M\_frizzled\_a

**Initial concentration**  $20 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in [PROTEIN\\_M\\_frizzled\\_a\\_inactivation\\_0](#) and as a product in [PROTEIN\\_M\\_frizzled\\_a\\_activation\\_0](#) and as a modifier in [PROTEIN\\_M\\_GSK3\\_i\\_activation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_frizzled\_a} = v_{324} - v_{325} \quad (2023)$$

### 8.356 Species PROTEIN\_M\_frizzled\_i

**Name** PROTEIN\_M\_frizzled\_i

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in [PROTEIN\\_M\\_frizzled\\_a\\_activation\\_0](#) and as a product in [PROTEIN\\_M\\_frizzled\\_a\\_inactivation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_frizzled\_i} = v_{325} - v_{324} \quad (2024)$$

### 8.357 Species PROTEIN\_M\_nBTcf

**Name** PROTEIN\_M\_nBTcf

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in twelve reactions (as a reactant in [PROTEIN\\_M\\_nBTcf\\_dissociation\\_0](#) and as a product in [PROTEIN\\_M\\_nBTcf\\_accociation\\_0](#) and as a modifier in [GENE\\_M\\_Blimp1\\_transcription\\_0](#), [GENE\\_M\\_Bra\\_transcription\\_0](#), [GENE\\_M\\_Eve\\_transcription\\_0](#), [GENE\\_M\\_FoxA\\_transcription\\_0](#), [GENE\\_M\\_FoxN23\\_transcription\\_0](#), [GENE\\_M\\_Gcm\\_transcription\\_0](#), [GENE\\_M\\_Hox\\_transcription\\_0](#), [GENE\\_M\\_Pmar1\\_transcription\\_0](#), [GENE\\_M\\_Wnt8\\_transcription\\_0](#), [GENE\\_M\\_z13\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_M\_nBTcf} = v_{326} - v_{327} \quad (2025)$$

### 8.358 Species PROTEIN\_M\_z13

**Name** PROTEIN\_M\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_M\_z13\_degradation\_0 and as a product in mRNA\_M\_z13\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_M\_z13} = v_{656} - v_{328} \quad (2026)$$

### 8.359 Species PROTEIN\_P\_Alx1

**Name** PROTEIN\_P\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in PROTEIN\_P\_Alx1\_degradation\_0 and as a product in mRNA\_P\_Alx1\_translation\_0 and as a modifier in GENE\_P\_Dri\_transcription\_0, GENE\_P\_FoxB\_transcription\_0, GENE\_P\_Gcm\_transcription\_0, GENE\_P\_Msp130\_transcription\_0, GENE\_P\_MspL\_transcription\_0, GENE\_P\_Sm27\_transcription\_0, GENE\_P\_Sm50\_transcription\_0, GENE\_P\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Alx1} = v_{658} - v_{329} \quad (2027)$$

### 8.360 Species PROTEIN\_P\_Apobec

**Name** PROTEIN\_P\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_Apobec\_degradation\_0 and as a product in mRNA\_P\_Apobec\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Apobec} = v_{660} - v_{330} \quad (2028)$$

### 8.361 Species PROTEIN\_P\_Blimp1

**Name** PROTEIN\_P\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_P\_Blimp1\_degradation\_0 and as a product in mRNA\_P\_Blimp1\_translation\_0 and as a modifier in GENE\_P\_Blimp1\_transcription\_0, GENE\_P\_Eve\_transcription\_0, GENE\_P\_Hox\_transcription\_0, GENE\_P\_Otx\_transcription\_0, GENE\_P\_Wnt8\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Blimp1} = v_{662} - v_{331} \quad (2029)$$

## 8.362 Species PROTEIN\_P\_Bra

**Name** PROTEIN\_P\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_P\_Bra\_degradation\_0 and as a product in mRNA\_P\_Bra\_translation\_0 and as a modifier in GENE\_P\_Apobec\_transcription\_0, GENE\_P\_FoxA\_transcription\_0, GENE\_P\_Gelsolin\_transcription\_0, GENE\_P\_Kakapo\_transcription\_0, GENE\_P\_OrCt\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Bra} = v_{664} - v_{332} \quad (2030)$$

## 8.363 Species PROTEIN\_P\_Brn

**Name** PROTEIN\_P\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_Brn\_degradation\_0 and as a product in mRNA\_P\_Brn\_translation\_0 and as a modifier in GENE\_P\_Blimp1\_transcription\_0, GENE\_P\_Endo16\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Brn} = v_{666} - v_{333} \quad (2031)$$

## 8.364 Species PROTEIN\_P\_CAPK

**Name** PROTEIN\_P\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_CAPK\_degradation\_0 and as a product in mRNA\_P\_CAPK\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_CAPK} = v_{668} - v_{334} \quad (2032)$$

## 8.365 Species PROTEIN\_P\_CyP

**Name** PROTEIN\_P\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_CyP\_degradation\_0 and as a product in mRNA\_P\_CyP\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_CyP} = v_{670} - v_{335} \quad (2033)$$

## 8.366 Species PROTEIN\_P\_Delta

**Name** PROTEIN\_P\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [PROTEIN\\_P\\_Delta\\_degradation\\_0](#), [PROTEIN\\_P\\_Delta\\_inactivation\\_0](#) and as a product in [PROTEIN\\_P\\_Delta\\_activation\\_0](#), [mRNA\\_P\\_Delta\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Delta} = v_{336} + v_{672} - v_{337} - v_{338} \quad (2034)$$

## 8.367 Species PROTEIN\_P\_Delta2

**Name** PROTEIN\_P\_Delta2

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_Delta\\_activation\\_0](#) and as a product in [PROTEIN\\_P\\_Delta\\_inactivation\\_0](#) and as a modifier in [PROTEIN\\_P\\_Notch\\_activation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Delta2} = v_{338} - v_{336} \quad (2035)$$

## 8.368 Species PROTEIN\_P\_Dpt

**Name** PROTEIN\_P\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Dpt\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Dpt\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Dpt} = v_{674} - v_{339} \quad (2036)$$

## 8.369 Species PROTEIN\_P\_Dri

**Name** PROTEIN\_P\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in [PROTEIN\\_P\\_Dri\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Dri\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_CyP\\_transcription\\_0](#), [GENE\\_P\\_FoxB\\_transcription\\_0](#), [GENE\\_P\\_Sm27\\_transcription\\_0](#), [GENE\\_P\\_Sm50\\_transcription\\_0](#), [GENE\\_P\\_VEGFR\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Dri} = v_{676} - v_{340} \quad (2037)$$

### 8.370 Species PROTEIN\_P\_Endo16

**Name** PROTEIN\_P\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Endo16\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Endo16\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Endo16} = v_{678} - v_{341} \quad (2038)$$

### 8.371 Species PROTEIN\_P\_Erg

**Name** PROTEIN\_P\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in ten reactions (as a reactant in [PROTEIN\\_P\\_Erg\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Erg\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Ficolin\\_transcription\\_0](#), [GENE\\_P\\_Fox0\\_transcription\\_0](#), [GENE\\_P\\_Hex\\_transcription\\_0](#), [GENE\\_P\\_Msp130\\_transcription\\_0](#), [GENE\\_P\\_MspL\\_transcription\\_0](#), [GENE\\_P\\_Sm27\\_transcription\\_0](#), [GENE\\_P\\_Sm50\\_transcription\\_0](#), [GENE\\_P\\_Tgif\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Erg} = v_{680} - v_{342} \quad (2039)$$

### 8.372 Species PROTEIN\_P\_Ets1

**Name** PROTEIN\_P\_Ets1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in 18 reactions (as a reactant in [PROTEIN\\_P\\_Ets1\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Ets1\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Alx1\\_transcription\\_0](#), [GENE\\_P\\_CyP\\_transcription\\_0](#), [GENE\\_P\\_Delta\\_transcription\\_0](#), [GENE\\_P\\_Dri\\_transcription\\_0](#), [GENE\\_P\\_Erg\\_transcription\\_0](#), [GENE\\_P\\_Ficolin\\_transcription\\_0](#), [GENE\\_P\\_FoxB\\_transcription\\_0](#), [GENE\\_P\\_Fox0\\_transcription\\_0](#), [GENE\\_P\\_Hex\\_transcription\\_0](#), [GENE\\_P\\_Msp130\\_transcription\\_0](#), [GENE\\_P\\_MspL\\_transcription\\_0](#), [GENE\\_P\\_Sm27\\_transcription\\_0](#), [GENE\\_P\\_Sm50\\_transcription\\_0](#), [GENE\\_P\\_TBr\\_transcription\\_0](#), [GENE\\_P\\_Tgif\\_transcription\\_0](#), [GENE\\_P\\_VEGFR\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Ets1} = v_{682} - v_{343} \quad (2040)$$

### 8.373 Species PROTEIN\_P\_Eve

**Name** PROTEIN\_P\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_Eve\_degradation\_0 and as a product in mRNA\_P\_Eve\_translation\_0 and as a modifier in GENE\_P\_Blimp1\_transcription\_0, GENE\_P\_Hox\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Eve} = v_{684} - v_{344} \quad (2041)$$

### 8.374 Species PROTEIN\_P\_Ficolin

**Name** PROTEIN\_P\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_Ficolin\_degradation\_0 and as a product in mRNA\_P\_Ficolin\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Ficolin} = v_{686} - v_{345} \quad (2042)$$

### 8.375 Species PROTEIN\_P\_FoxA

**Name** PROTEIN\_P\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_FoxA\_degradation\_0 and as a product in mRNA\_P\_FoxA\_translation\_0 and as a modifier in GENE\_P\_FoxA\_transcription\_0, GENE\_P\_Gcm\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_FoxA} = v_{688} - v_{346} \quad (2043)$$

### 8.376 Species PROTEIN\_P\_FoxB

**Name** PROTEIN\_P\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_FoxB\_degradation\_0 and as a product in mRNA\_P\_FoxB\_translation\_0 and as a modifier in GENE\_P\_FoxB\_transcription\_0, GENE\_P\_Msp130\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_FoxB} = v_{690} - v_{347} \quad (2044)$$

### 8.377 Species PROTEIN\_P\_FoxN23

**Name** PROTEIN\_P\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_FoxN23\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_FoxN23\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Nrl\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_FoxN23} = v_{692} - v_{348} \quad (2045)$$

### 8.378 Species PROTEIN\_P\_FoxO

**Name** PROTEIN\_P\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_FoxO\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_FoxO\\_translation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_FoxO} = v_{694} - v_{349} \quad (2046)$$

### 8.379 Species PROTEIN\_P\_FvMo

**Name** PROTEIN\_P\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_FvMo\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_FvMo\\_translation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_FvMo} = v_{696} - v_{350} \quad (2047)$$

### 8.380 Species PROTEIN\_P\_GSK3\_a

**Name** PROTEIN\_P\_GSK3\_a

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_GSK3\\_i\\_activation\\_0](#) and as a product in [PROTEIN\\_P\\_GSK3\\_i\\_inactivation\\_0](#) and as a modifier in [PROTEIN\\_P\\_cB\\_a\\_degradation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_GSK3\_a} = v_{352} - v_{351} \quad (2048)$$

### 8.381 Species PROTEIN\_P\_GSK3\_i

**Name** PROTEIN\_P\_GSK3\_i

**Initial concentration** 20 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_GSK3\_i\_inactivation\_0 and as a product in PROTEIN\_P\_GSK3\_i\_activation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_GSK3\_i} = v_{351} - v_{352} \quad (2049)$$

### 8.382 Species PROTEIN\_P\_GataC

**Name** PROTEIN\_P\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_P\_GataC\_degradation\_0 and as a product in mRNA\_P\_GataC\_translation\_0 and as a modifier in GENE\_P\_GataC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_GataC} = v_{698} - v_{353} \quad (2050)$$

### 8.383 Species PROTEIN\_P\_GataE

**Name** PROTEIN\_P\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 14 reactions (as a reactant in PROTEIN\_P\_GataE\_degradation\_0 and as a product in mRNA\_P\_GataE\_translation\_0 and as a modifier in GENE\_P\_Blimp1\_transcription\_0, GENE\_P\_Bra\_transcription\_0, GENE\_P\_Brn\_transcription\_0, GENE\_P\_FoxA\_transcription\_0, GENE\_P\_FvMo\_transcription\_0, GENE\_P\_GataC\_transcription\_0, GENE\_P\_Lim\_transcription\_0, GENE\_P\_Not\_transcription\_0, GENE\_P\_Nrl\_transcription\_0, GENE\_P\_Otx\_transcription\_0, GENE\_P\_Pks\_transcription\_0, GENE\_P\_SuTx\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_GataE} = v_{700} - v_{354} \quad (2051)$$

### 8.384 Species PROTEIN\_P\_Gcad

**Name** PROTEIN\_P\_Gcad

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_Gcad\_degradation\_0 and as a product in mRNA\_P\_Gcad\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Gcad} = v_{702} - v_{355} \quad (2052)$$

### 8.385 Species PROTEIN\_P\_Gcm

**Name** PROTEIN\_P\_Gcm

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in eight reactions (as a reactant in [PROTEIN\\_P\\_Gcm\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Gcm\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Alx1\\_transcription\\_0](#), [GENE\\_P\\_Dpt\\_transcription\\_0](#), [GENE\\_P\\_FvMo\\_transcription\\_0](#), [GENE\\_P\\_Gcm\\_transcription\\_0](#), [GENE\\_P\\_Pks\\_transcription\\_0](#), [GENE\\_P\\_SuTx\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Gcm} = v_{704} - v_{356} \quad (2053)$$

### 8.386 Species PROTEIN\_P\_Gelsolin

**Name** PROTEIN\_P\_Gelsolin

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Gelsolin\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Gelsolin\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Gelsolin} = v_{706} - v_{357} \quad (2054)$$

### 8.387 Species PROTEIN\_P\_Gro

**Name** PROTEIN\_P\_Gro

**Initial concentration**  $30 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_GroTCF\\_accociation\\_0](#) and as a product in [PROTEIN\\_P\\_GroTCF\\_dissociation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Gro} = v_{359} - v_{358} \quad (2055)$$

### 8.388 Species PROTEIN\_P\_GroTCF

**Name** PROTEIN\_P\_GroTCF

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in ten reactions (as a reactant in [PROTEIN\\_P\\_GroTCF\\_dissociation\\_0](#) and as a product in [PROTEIN\\_P\\_GroTCF\\_accociation\\_0](#) and as a modifier in [GENE\\_P\\_Blimp1\\_transcription\\_0](#), [GENE\\_P\\_Bra\\_transcription\\_0](#), [GENE\\_P\\_Eve\\_transcription\\_0](#), [GENE\\_P\\_Gcm\\_transcription\\_0](#), [GENE\\_P\\_Hox\\_transcription\\_0](#), [GENE\\_P\\_Pmar1\\_transcription\\_0](#), [GENE\\_P\\_Wnt8\\_transcription\\_0](#), [GENE\\_P\\_z13\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_GroTCF} = v_{358} - v_{359} \quad (2056)$$

### 8.389 Species PROTEIN\_P\_GroTFC

**Name** PROTEIN\_P\_GroTFC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in GENE\_P\_FoxA\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_GroTFC} = 0 \quad (2057)$$

### 8.390 Species PROTEIN\_P\_HesC

**Name** PROTEIN\_P\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in nine reactions (as a reactant in PROTEIN\_P\_HesC\_degradation\_0 and as a product in mRNA\_P\_HesC\_translation\_0 and as a modifier in GENE\_P\_Alx1\_transcription\_0, GENE\_P\_Delta\_transcription\_0, GENE\_P\_Ets1\_transcription\_0, GENE\_P\_Nrl\_transcription\_0, GENE\_P\_SoxC\_transcription\_0, GENE\_P\_TBr\_transcription\_0, GENE\_P\_Tel\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_HesC} = v_{708} - v_{360} \quad (2058)$$

### 8.391 Species PROTEIN\_P\_Hex

**Name** PROTEIN\_P\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in twelve reactions (as a reactant in PROTEIN\_P\_Hex\_degradation\_0 and as a product in mRNA\_P\_Hex\_translation\_0 and as a modifier in GENE\_P\_Erg\_transcription\_0, GENE\_P\_Ficolin\_transcription\_0, GENE\_P\_FoxO\_transcription\_0, GENE\_P\_Msp130\_transcription\_0, GENE\_P\_MspL\_transcription\_0, GENE\_P\_Sm27\_transcription\_0, GENE\_P\_Sm50\_transcription\_0, GENE\_P\_Snail\_transcription\_0, GENE\_P\_Tgif\_transcription\_0, GENE\_P\_VEGFR\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Hex} = v_{710} - v_{361} \quad (2059)$$

### 8.392 Species PROTEIN\_P\_Hnf6

**Name** PROTEIN\_P\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in PROTEIN\_P\_Hnf6\_degradation\_0 and as a product in mRNA\_P\_Hnf6\_translation\_0 and as a modifier in GENE\_P\_Ficolin\_transcription\_0, GENE\_P\_GataC\_transcription\_0, GENE\_P\_Msp130\_transcription\_0, GENE\_P\_Sm27\_transcription\_0, GENE\_P\_Sm50\_transcription\_0, GENE\_P\_z13\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Hnf6} = v_{712} - v_{362} \quad (2060)$$

### 8.393 Species PROTEIN\_P\_Hox

**Name** PROTEIN\_P\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in six reactions (as a reactant in PROTEIN\_P\_Hox\_degradation\_0 and as a product in mRNA\_P\_Hox\_translation\_0 and as a modifier in GENE\_P\_Apobec\_transcription\_0, GENE\_P\_Eve\_transcription\_0, GENE\_P\_GataE\_transcription\_0, GENE\_P\_OrCt\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Hox} = v_{714} - v_{363} \quad (2061)$$

### 8.394 Species PROTEIN\_P\_Kakapo

**Name** PROTEIN\_P\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_Kakapo\_degradation\_0 and as a product in mRNA\_P\_Kakapo\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Kakapo} = v_{716} - v_{364} \quad (2062)$$

### 8.395 Species PROTEIN\_P\_L1

**Name** PROTEIN\_P\_L1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_L1\_degradation\_0, PROTEIN\_P\_VEGFSignal\_association\_0 and as a product in PROTEIN\_P\_VEGFSignal\_dissociation\_0, mRNA\_P\_L1\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_L1} = v_{398} + v_{718} - v_{365} - v_{397} \quad (2063)$$

## 8.396 Species PROTEIN\_P\_Lim

**Name** PROTEIN\_P\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Lim\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Lim\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Lim} = v_{720} - v_{366} \quad (2064)$$

## 8.397 Species PROTEIN\_P\_Msp130

**Name** PROTEIN\_P\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Msp130\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Msp130\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Msp130} = v_{722} - v_{367} \quad (2065)$$

## 8.398 Species PROTEIN\_P\_MspL

**Name** PROTEIN\_P\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_MspL\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_MspL\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_MspL} = v_{724} - v_{368} \quad (2066)$$

## 8.399 Species PROTEIN\_P\_Not

**Name** PROTEIN\_P\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Not\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Not\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Not} = v_{726} - v_{369} \quad (2067)$$

## 8.400 Species PROTEIN\_P\_Notch

**Name** PROTEIN\_P\_Notch

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_Notch\\_inactivation\\_0](#) and as a product in [PROTEIN\\_P\\_Notch\\_activation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Notch} = v_{370} - v_{371} \quad (2068)$$

## 8.401 Species PROTEIN\_P\_Notch2

**Name** PROTEIN\_P\_Notch2

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [PROTEIN\\_P\\_Notch\\_activation\\_0](#), [PROTEIN\\_P\\_SuHN\\_association\\_0](#) and as a product in [PROTEIN\\_P\\_Notch\\_inactivation\\_0](#), [PROTEIN\\_P\\_SuHN\\_dissociation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Notch2} = v_{371} + v_{384} - v_{370} - v_{383} \quad (2069)$$

## 8.402 Species PROTEIN\_P\_Nrl

**Name** PROTEIN\_P\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_Nrl\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Nrl\\_translation\\_0](#) and as a modifier in [PROTEIN\\_P\\_Delta\\_activation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_Nrl} = v_{728} - v_{372} \quad (2070)$$

## 8.403 Species PROTEIN\_P\_OrCt

**Name** PROTEIN\_P\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_OrCt\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_OrCt\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_OrCt} = v_{730} - v_{373} \quad (2071)$$

## 8.404 Species PROTEIN\_P\_Otx

**Name** PROTEIN\_P\_Otx

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in eleven reactions (as a reactant in `PROTEIN_P_Otx_degradation_0` and as a product in `mRNA_P_Otx_translation_0` and as a modifier in `GENE_P_Blimp1_transcription_0`, `GENE_P_Bra_transcription_0`, `GENE_P_Endo16_transcription_0`, `GENE_P_FoxA_transcription_0`, `GENE_P_GataE_transcription_0`, `GENE_P_Hox_transcription_0`, `GENE_P_Lim_transcription_0`, `GENE_P_Otx_transcription_0`, `GENE_P_Pmar1_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_P\_Otx} = v_{732} - v_{374} \quad (2072)$$

## 8.405 Species PROTEIN\_P\_Pks

**Name** PROTEIN\_P\_Pks

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_P_Pks_degradation_0` and as a product in `mRNA_P_Pks_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_P\_Pks} = v_{734} - v_{375} \quad (2073)$$

## 8.406 Species PROTEIN\_P\_Pmar1

**Name** PROTEIN\_P\_Pmar1

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in `PROTEIN_P_Pmar1_degradation_0` and as a product in `mRNA_P_Pmar1_translation_0` and as a modifier in `GENE_P_HesC_transcription_0`).

$$\frac{d}{dt} \text{PROTEIN\_P\_Pmar1} = v_{736} - v_{376} \quad (2074)$$

## 8.407 Species PROTEIN\_P\_Sm27

**Name** PROTEIN\_P\_Sm27

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in `PROTEIN_P_Sm27_degradation_0` and as a product in `mRNA_P_Sm27_translation_0`).

$$\frac{d}{dt} \text{PROTEIN\_P\_Sm27} = v_{738} - v_{377} \quad (2075)$$

## 8.408 Species PROTEIN\_P\_Sm30

**Name** PROTEIN\_P\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_Sm30\_degradation\_0 and as a product in mRNA\_P\_Sm30\_translation\_0).

$$\frac{d}{dt}\text{PROTEIN\_P\_Sm30} = v_{740} - v_{378} \quad (2076)$$

## 8.409 Species PROTEIN\_P\_Sm50

**Name** PROTEIN\_P\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_Sm50\_degradation\_0 and as a product in mRNA\_P\_Sm50\_translation\_0).

$$\frac{d}{dt}\text{PROTEIN\_P\_Sm50} = v_{742} - v_{379} \quad (2077)$$

## 8.410 Species PROTEIN\_P\_Snail

**Name** PROTEIN\_P\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_P\_Snail\_degradation\_0 and as a product in mRNA\_P\_Snail\_translation\_0 and as a modifier in GENE\_P\_Gcad\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_P\_Snail} = v_{744} - v_{380} \quad (2078)$$

## 8.411 Species PROTEIN\_P\_SoxB1

**Name** PROTEIN\_P\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_SoxB1\_degradation\_0 and as a product in mRNA\_P\_SoxB1\_translation\_0 and as a modifier in GENE\_P\_CyP\_transcription\_0, GENE\_P\_SoxB1\_transcription\_0).

$$\frac{d}{dt}\text{PROTEIN\_P\_SoyB1} = v_{746} - v_{381} \quad (2079)$$

## 8.412 Species PROTEIN\_P\_SoxC

**Name** PROTEIN\_P\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in PROTEIN\_P\_SoxC\_degradation\_0 and as a product in mRNA\_P\_SoxC\_translation\_0 and as a modifier in GENE\_P\_SoxC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_SoxC} = v_{748} - v_{382} \quad (2080)$$

## 8.413 Species PROTEIN\_P\_SuH

**Name** PROTEIN\_P\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_SuHN\_accociation\_0 and as a product in PROTEIN\_P\_SuHN\_dissociation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_SuH} = v_{384} - v_{383} \quad (2081)$$

## 8.414 Species PROTEIN\_P\_SuHN

**Name** PROTEIN\_P\_SuHN

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_SuHN\_dissociation\_0 and as a product in PROTEIN\_P\_SuHN\_accociation\_0 and as a modifier in GENE\_P\_GataE\_transcription\_0, GENE\_P\_Gcm\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_SuHN} = v_{383} - v_{384} \quad (2082)$$

## 8.415 Species PROTEIN\_P\_SuTx

**Name** PROTEIN\_P\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in PROTEIN\_P\_SuTx\_degradation\_0 and as a product in mRNA\_P\_SuTx\_translation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_SuTx} = v_{750} - v_{385} \quad (2083)$$

## 8.416 Species PROTEIN\_P\_TBr

**Name** PROTEIN\_P\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in seven reactions (as a reactant in PROTEIN\_P\_TBr\_degradation\_0 and as a product in mRNA\_P\_TBr\_translation\_0 and as a modifier in GENE\_P\_Erg\_transcription\_0, GENE\_P\_FoxB\_transcription\_0, GENE\_P\_Msp130\_transcription\_0, GENE\_P\_Nrl\_transcription\_0, GENE\_P\_TBr\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_TBr} = v_{752} - v_{386} \quad (2084)$$

## 8.417 Species PROTEIN\_P\_TCF

**Name** PROTEIN\_P\_TCF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in PROTEIN\_P\_GroTCF\_accociation\_0, PROTEIN\_P\_nBTcf\_accociation\_0 and as a product in PROTEIN\_P\_GroTCF\_dissociation\_0, PROTEIN\_P\_nBTcf\_dissociation\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_TCF} = v_{359} + v_{405} - v_{358} - v_{404} \quad (2085)$$

## 8.418 Species PROTEIN\_P\_Tel

**Name** PROTEIN\_P\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in five reactions (as a reactant in PROTEIN\_P\_Tel\_degradation\_0 and as a product in mRNA\_P\_Tel\_translation\_0 and as a modifier in GENE\_P\_Sm27\_transcription\_0, GENE\_P\_Sm50\_transcription\_0, GENE\_P\_Tel\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Tel} = v_{754} - v_{387} \quad (2086)$$

## 8.419 Species PROTEIN\_P\_Tgif

**Name** PROTEIN\_P\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in eight reactions (as a reactant in PROTEIN\_P\_Tgif\_degradation\_0 and as a product in mRNA\_P\_Tgif\_translation\_0 and as a modifier in GENE\_P\_Alx1\_transcription\_0, GENE\_P\_FoxA\_transcription\_0, GENE\_P\_FoxO\_transcription\_0, GENE\_P\_Hex\_transcription\_0, GENE\_P\_Nrl\_transcription\_0, GENE\_P\_Tgif\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_Tgif} = v_{756} - v_{388} \quad (2087)$$

## 8.420 Species PROTEIN\_P\_UMADelta

**Name** PROTEIN\_P\_UMADelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_P\\_Delta\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_UMADelta} = 0 \quad (2088)$$

## 8.421 Species PROTEIN\_P\_UMANrl

**Name** PROTEIN\_P\_UMANrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_P\\_Nrl\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_UMANrl} = 0 \quad (2089)$$

## 8.422 Species PROTEIN\_P\_UVAOtx

**Name** PROTEIN\_P\_UVAOtx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_P\\_Otx\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_UVAOtx} = 0 \quad (2090)$$

## 8.423 Species PROTEIN\_P\_UbiqAlx1

**Name** PROTEIN\_P\_UbiqAlx1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_UbiqAlx1\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_UbiqAlx1\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Alx1\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_UbiqAlx1} = v_{758} - v_{389} \quad (2091)$$

## 8.424 Species PROTEIN\_P\_UbiqDelta

**Name** PROTEIN\_P\_UbiqDelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_P\\_Delta\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_UbiqDelta} = 0 \quad (2092)$$

## 8.425 Species PROTEIN\_P\_UbiqES

**Name** PROTEIN\_P\_UbiqES

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_UbiqES\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_UbiqES\\_translation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_UbiqES} = v_{760} - v_{390} \quad (2093)$$

## 8.426 Species PROTEIN\_P\_UbiqEts1

**Name** PROTEIN\_P\_UbiqEts1

**Initial concentration** 10 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_UbiqEts1\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_UbiqEts1\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Ets1\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_UbiqEts1} = v_{762} - v_{391} \quad (2094)$$

## 8.427 Species PROTEIN\_P\_UbiqGcad

**Name** PROTEIN\_P\_UbiqGcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in one reaction (as a modifier in [GENE\\_P\\_Gcad\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_UbiqGcad} = 0 \quad (2095)$$

### 8.428 Species PROTEIN\_P\_UbiqHesC

**Name** PROTEIN\_P\_UbiqHesC

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in PROTEIN\_P\_UbiqHesC\_degradation\_0 and as a product in mRNA\_P\_UbiqHesC\_translation\_0 and as a modifier in GENE\_P\_HesC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_UbiqHesC} = v_{764} - v_{392} \quad (2096)$$

### 8.429 Species PROTEIN\_P\_UbiqHnf6

**Name** PROTEIN\_P\_UbiqHnf6

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in PROTEIN\_P\_UbiqHnf6\_degradation\_0 and as a product in mRNA\_P\_UbiqHnf6\_translation\_0 and as a modifier in GENE\_P\_Hnf6\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_UbiqHnf6} = v_{766} - v_{393} \quad (2097)$$

### 8.430 Species PROTEIN\_P\_UbiqSoxB1

**Name** PROTEIN\_P\_UbiqSoxB1

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in one reaction (as a modifier in GENE\_P\_SoxB1\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_UbiqSoxB1} = 0 \quad (2098)$$

### 8.431 Species PROTEIN\_P\_UbiqSoxC

**Name** PROTEIN\_P\_UbiqSoxC

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in PROTEIN\_P\_UbiqSoxC\_degradation\_0 and as a product in mRNA\_P\_UbiqSoxC\_translation\_0 and as a modifier in GENE\_P\_SoxC\_transcription\_0).

$$\frac{d}{dt} \text{PROTEIN\_P\_UbiqSoxC} = v_{768} - v_{394} \quad (2099)$$

## 8.432 Species PROTEIN\_P\_UbiqTel

**Name** PROTEIN\_P\_UbiqTel

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_UbiqTel\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_UbiqTel\\_translation\\_0](#) and as a modifier in [GENE\\_P\\_Tel\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_UbiqTel} = v_{770} - v_{395} \quad (2100)$$

## 8.433 Species PROTEIN\_P\_VEGFR

**Name** PROTEIN\_P\_VEGFR

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in four reactions (as a reactant in [PROTEIN\\_P\\_VEGFR\\_degradation\\_0](#), [PROTEIN\\_P\\_VEGFSignal\\_association\\_0](#) and as a product in [PROTEIN\\_P\\_VEGFSignal\\_dissociation\\_0](#), [mRNA\\_P\\_VEGFR\\_translation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_VEGFR} = v_{398} + v_{772} - v_{396} - v_{397} \quad (2101)$$

## 8.434 Species PROTEIN\_P\_VEGFSignal

**Name** PROTEIN\_P\_VEGFSignal

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in five reactions (as a reactant in [PROTEIN\\_P\\_VEGFSignal\\_dissociation\\_0](#) and as a product in [PROTEIN\\_P\\_VEGFSignal\\_association\\_0](#) and as a modifier in [GENE\\_P\\_MspL\\_transcription\\_0](#), [GENE\\_P\\_Sm30\\_transcription\\_0](#), [GENE\\_P\\_Sm50\\_transcription\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_VEGFSignal} = v_{397} - v_{398} \quad (2102)$$

## 8.435 Species PROTEIN\_P\_Wnt8

**Name** PROTEIN\_P\_Wnt8

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_Wnt8\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_Wnt8\\_translation\\_0](#) and as a modifier in [PROTEIN\\_P\\_frizzled\\_a\\_activation\\_0](#)).

$$\frac{d}{dt}\text{PROTEIN\_P\_Wnt8} = v_{774} - v_{399} \quad (2103)$$

## 8.436 Species PROTEIN\_P\_cB

**Name** PROTEIN\_P\_cB

**Initial concentration**  $10 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in five reactions (as a reactant in [PROTEIN\\_P\\_cB\\_a\\_degradation\\_0](#), [PROTEIN\\_P\\_cB\\_degradation\\_0](#), [PROTEIN\\_P\\_nBTcf\\_accociation\\_0](#) and as a product in [PROTEIN\\_P\\_nBTcf\\_dissociation\\_0](#), [mRNA\\_P\\_cB\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_cB} = v_{405} + v_{776} - v_{400} - v_{401} - v_{404} \quad (2104)$$

## 8.437 Species PROTEIN\_P\_frizzled\_a

**Name** PROTEIN\_P\_frizzled\_a

**Initial concentration**  $20 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in three reactions (as a reactant in [PROTEIN\\_P\\_frizzled\\_a\\_inactivation\\_0](#) and as a product in [PROTEIN\\_P\\_frizzled\\_a\\_activation\\_0](#) and as a modifier in [PROTEIN\\_P\\_GSK3\\_i\\_activation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_frizzled\_a} = v_{402} - v_{403} \quad (2105)$$

## 8.438 Species PROTEIN\_P\_frizzled\_i

**Name** PROTEIN\_P\_frizzled\_i

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_frizzled\\_a\\_activation\\_0](#) and as a product in [PROTEIN\\_P\\_frizzled\\_a\\_inactivation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_frizzled\_i} = v_{403} - v_{402} \quad (2106)$$

## 8.439 Species PROTEIN\_P\_nBTCF

**Name** PROTEIN\_P\_nBTCF

**Initial concentration**  $0 \text{ mol} \cdot \text{l}^{-1}$

This species takes part in twelve reactions (as a reactant in [PROTEIN\\_P\\_nBTcf\\_dissociation\\_0](#) and as a product in [PROTEIN\\_P\\_nBTcf\\_accociation\\_0](#) and as a modifier in [GENE\\_P\\_Blimp1\\_transcription\\_0](#), [GENE\\_P\\_Bra\\_transcription\\_0](#), [GENE\\_P\\_Eve\\_transcription\\_0](#), [GENE\\_P\\_FoxA\\_transcription\\_0](#), [GENE\\_P\\_FoxN23\\_transcription\\_0](#), [GENE\\_P\\_Gcm\\_transcription\\_0](#), [GENE\\_P\\_Hox\\_transcription\\_0](#), [GENE\\_P\\_Pmar1\\_transcription\\_0](#), [GENE\\_P\\_Wnt8\\_transcription\\_0](#), [GENE\\_P\\_z13\\_transcription\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_nBTCF} = v_{404} - v_{405} \quad (2107)$$

## 8.440 Species PROTEIN\_P\_z13

**Name** PROTEIN\_P\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [PROTEIN\\_P\\_z13\\_degradation\\_0](#) and as a product in [mRNA\\_P\\_z13\\_translation\\_0](#)).

$$\frac{d}{dt} \text{PROTEIN\_P\_z13} = v_{778} - v_{406} \quad (2108)$$

## 8.441 Species mRNA\_E\_Alx1

**Name** mRNA\_E\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Alx1\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Alx1\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Alx1\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Alx1} = v_{11} - v_{419} \quad (2109)$$

## 8.442 Species mRNA\_E\_Apobec

**Name** mRNA\_E\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Apobec\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Apobec\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Apobec\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Apobec} = v_{12} - v_{421} \quad (2110)$$

## 8.443 Species mRNA\_E\_Blimp1

**Name** mRNA\_E\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Blimp1\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Blimp1\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Blimp1\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Blimp1} = v_{13} - v_{423} \quad (2111)$$

## 8.444 Species mRNA\_E\_Bra

**Name** mRNA\_E\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_Bra_degradation_0` and as a product in `GENE_E_Bra_transcription_0` and as a modifier in `mRNA_E_Bra_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_Bra} = v_{14} - v_{425} \quad (2112)$$

## 8.445 Species mRNA\_E\_Brn

**Name** mRNA\_E\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_Brn_degradation_0` and as a product in `GENE_E_Brn_transcription_0` and as a modifier in `mRNA_E_Brn_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_Brn} = v_{15} - v_{427} \quad (2113)$$

## 8.446 Species mRNA\_E\_CAPK

**Name** mRNA\_E\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in `mRNA_E_CAPK_degradation_0` and as a modifier in `mRNA_E_CAPK_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_CAPK} = -v_{429} \quad (2114)$$

## 8.447 Species mRNA\_E\_CyP

**Name** mRNA\_E\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_CyP_degradation_0` and as a product in `GENE_E_CyP_transcription_0` and as a modifier in `mRNA_E_CyP_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_CyP} = v_{16} - v_{431} \quad (2115)$$

## 8.448 Species mRNA\_E\_Delta

**Name** mRNA\_E\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Delta\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Delta\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Delta\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Delta} = \nu_{17} - \nu_{433} \quad (2116)$$

## 8.449 Species mRNA\_E\_Dpt

**Name** mRNA\_E\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Dpt\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Dpt\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Dpt\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Dpt} = \nu_{18} - \nu_{435} \quad (2117)$$

## 8.450 Species mRNA\_E\_Dri

**Name** mRNA\_E\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Dri\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Dri\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Dri\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Dri} = \nu_{19} - \nu_{437} \quad (2118)$$

## 8.451 Species mRNA\_E\_ES

**Name** mRNA\_E\_ES

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_ES\\_degradation\\_0](#) and as a product in [GENE\\_E\\_ES\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_ES\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_ES} = \nu_{20} - \nu_{439} \quad (2119)$$

## 8.452 Species mRNA\_E\_Endo16

**Name** mRNA\_E\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Endo16\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Endo16\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Endo16\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Endo16} = v_{21} - v_{441} \quad (2120)$$

## 8.453 Species mRNA\_E\_Erg

**Name** mRNA\_E\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Erg\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Erg\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Erg\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Erg} = v_{22} - v_{443} \quad (2121)$$

## 8.454 Species mRNA\_E\_Ets1

**Name** mRNA\_E\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Ets1\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Ets1\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Ets1\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Ets1} = v_{23} - v_{445} \quad (2122)$$

## 8.455 Species mRNA\_E\_Eve

**Name** mRNA\_E\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Eve\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Eve\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Eve\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Eve} = v_{24} - v_{447} \quad (2123)$$

## 8.456 Species mRNA\_E\_Ficolin

**Name** mRNA\_E\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Ficolin\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Ficolin\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Ficolin\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Ficolin} = v_{25} - v_{449} \quad (2124)$$

## 8.457 Species mRNA\_E\_FoxA

**Name** mRNA\_E\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_FoxA\\_degradation\\_0](#) and as a product in [GENE\\_E\\_FoxA\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_FoxA\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_FoxA} = v_{26} - v_{451} \quad (2125)$$

## 8.458 Species mRNA\_E\_FoxB

**Name** mRNA\_E\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_FoxB\\_degradation\\_0](#) and as a product in [GENE\\_E\\_FoxB\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_FoxB\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_FoxB} = v_{27} - v_{453} \quad (2126)$$

## 8.459 Species mRNA\_E\_FoxN23

**Name** mRNA\_E\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_FoxN23\\_degradation\\_0](#) and as a product in [GENE\\_E\\_FoxN23\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_FoxN23\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_FoxN23} = v_{28} - v_{455} \quad (2127)$$

## 8.460 Species mRNA\_E\_FoxO

**Name** mRNA\_E\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_FoxO\\_degradation\\_0](#) and as a product in [GENE\\_E\\_FoxO\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_FoxO\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_FoxO} = v_{29} - v_{457} \quad (2128)$$

## 8.461 Species mRNA\_E\_FvMo

**Name** mRNA\_E\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_FvMo\\_degradation\\_0](#) and as a product in [GENE\\_E\\_FvMo\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_FvMo\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_FvMo} = v_{30} - v_{459} \quad (2129)$$

## 8.462 Species mRNA\_E\_GataC

**Name** mRNA\_E\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_GataC\\_degradation\\_0](#) and as a product in [GENE\\_E\\_GataC\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_GataC\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_GataC} = v_{31} - v_{461} \quad (2130)$$

## 8.463 Species mRNA\_E\_GataE

**Name** mRNA\_E\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_GataE\\_degradation\\_0](#) and as a product in [GENE\\_E\\_GataE\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_GataE\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_GataE} = v_{32} - v_{463} \quad (2131)$$

## 8.464 Species mRNA\_E\_Gcad

**Name** mRNA\_E\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in mRNA\_E\_Gcad\_degradation\_0 and as a product in E\_Gcad\_Hill\_Kinetic\_0, GENE\_E\_Gcad\_transcription\_0 and as a modifier in mRNA\_E\_Gcad\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_Gcad} = v_1 + v_{33} - v_{465} \quad (2132)$$

## 8.465 Species mRNA\_E\_Gcm

**Name** mRNA\_E\_Gcm

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_Gcm\_degradation\_0 and as a product in GENE\_E\_Gcm\_transcription\_0 and as a modifier in mRNA\_E\_Gcm\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_Gcm} = v_{34} - v_{467} \quad (2133)$$

## 8.466 Species mRNA\_E\_Gelsolin

**Name** mRNA\_E\_Gelsolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_Gelsolin\_degradation\_0 and as a product in GENE\_E\_Gelsolin\_transcription\_0 and as a modifier in mRNA\_E\_Gelsolin\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_Gelsolin} = v_{35} - v_{469} \quad (2134)$$

## 8.467 Species mRNA\_E\_HesC

**Name** mRNA\_E\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_HesC\_degradation\_0 and as a product in GENE\_E\_HesC\_transcription\_0 and as a modifier in mRNA\_E\_HesC\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_HesC} = v_{36} - v_{471} \quad (2135)$$

## 8.468 Species mRNA\_E\_Hex

**Name** mRNA\_E\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Hex\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Hex\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Hex\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Hex} = \text{v}_{37} - \text{v}_{473} \quad (2136)$$

## 8.469 Species mRNA\_E\_Hnf6

**Name** mRNA\_E\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Hnf6\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Hnf6\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Hnf6\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Hnf6} = \text{v}_{38} - \text{v}_{475} \quad (2137)$$

## 8.470 Species mRNA\_E\_Hox

**Name** mRNA\_E\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Hox\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Hox\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Hox\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Hox} = \text{v}_{39} - \text{v}_{477} \quad (2138)$$

## 8.471 Species mRNA\_E\_Kakapo

**Name** mRNA\_E\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Kakapo\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Kakapo\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Kakapo\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Kakapo} = \text{v}_{40} - \text{v}_{479} \quad (2139)$$

## 8.472 Species mRNA\_E\_Lim

**Name** mRNA\_E\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_Lim\_degradation\_0 and as a product in GENE\_E\_Lim\_transcription\_0 and as a modifier in mRNA\_E\_Lim\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_Lim} = \boxed{v_{41}} - \boxed{v_{481}} \quad (2140)$$

## 8.473 Species mRNA\_E\_Msp130

**Name** mRNA\_E\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_Msp130\_degradation\_0 and as a product in GENE\_E\_Msp130\_transcription\_0 and as a modifier in mRNA\_E\_Msp130\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_Msp130} = \boxed{v_{42}} - \boxed{v_{483}} \quad (2141)$$

## 8.474 Species mRNA\_E\_MspL

**Name** mRNA\_E\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_MspL\_degradation\_0 and as a product in GENE\_E\_MspL\_transcription\_0 and as a modifier in mRNA\_E\_MspL\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_MspL} = \boxed{v_{43}} - \boxed{v_{485}} \quad (2142)$$

## 8.475 Species mRNA\_E\_Not

**Name** mRNA\_E\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_E\_Not\_degradation\_0 and as a product in GENE\_E\_Not\_transcription\_0 and as a modifier in mRNA\_E\_Not\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_E\_Not} = \boxed{v_{44}} - \boxed{v_{487}} \quad (2143)$$

## 8.476 Species mRNA\_E\_Notch

**Name** mRNA\_E\_Notch

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Notch\\_degradation\\_0](#) and as a product in [E\\_Notch\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_Notch\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Notch} = v_2 - v_{489} \quad (2144)$$

## 8.477 Species mRNA\_E\_Nrl

**Name** mRNA\_E\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Nrl\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Nrl\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Nrl\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Nrl} = v_{45} - v_{491} \quad (2145)$$

## 8.478 Species mRNA\_E\_OrCt

**Name** mRNA\_E\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_OrCt\\_degradation\\_0](#) and as a product in [GENE\\_E\\_OrCt\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_OrCt\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_OrCt} = v_{46} - v_{493} \quad (2146)$$

## 8.479 Species mRNA\_E\_Otx

**Name** mRNA\_E\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [mRNA\\_E\\_Otx\\_degradation\\_0](#) and as a product in [E\\_Otx\\_Hill\\_Kinetic\\_0](#), [GENE\\_E\\_Otx\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Otx\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Otx} = v_3 + v_{47} - v_{495} \quad (2147)$$

## 8.480 Species mRNA\_E\_Pks

**Name** mRNA\_E\_Pks

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_Pks_degradation_0` and as a product in `GENE_E_Pks_transcription_0` and as a modifier in `mRNA_E_Pks_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_Pks} = v_{48} - v_{497} \quad (2148)$$

## 8.481 Species mRNA\_E\_Pmar1

**Name** mRNA\_E\_Pmar1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_Pmar1_degradation_0` and as a product in `GENE_E_Pmar1_transcription_0` and as a modifier in `mRNA_E_Pmar1_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_Pmar1} = v_{49} - v_{499} \quad (2149)$$

## 8.482 Species mRNA\_E\_Sm27

**Name** mRNA\_E\_Sm27

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_Sm27_degradation_0` and as a product in `GENE_E_Sm27_transcription_0` and as a modifier in `mRNA_E_Sm27_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_Sm27} = v_{50} - v_{501} \quad (2150)$$

## 8.483 Species mRNA\_E\_Sm30

**Name** mRNA\_E\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_Sm30_degradation_0` and as a product in `GENE_E_Sm30_transcription_0` and as a modifier in `mRNA_E_Sm30_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_Sm30} = v_{51} - v_{503} \quad (2151)$$

## 8.484 Species mRNA\_E\_Sm50

**Name** mRNA\_E\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Sm50\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Sm50\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Sm50\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Sm50} = v_{52} - v_{505} \quad (2152)$$

## 8.485 Species mRNA\_E\_Snail

**Name** mRNA\_E\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Snail\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Snail\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Snail\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Snail} = v_{53} - v_{507} \quad (2153)$$

## 8.486 Species mRNA\_E\_SoxB1

**Name** mRNA\_E\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [mRNA\\_E\\_SoxB1\\_degradation\\_0](#) and as a product in [E\\_SoxB1\\_Hill\\_Kinetic\\_0](#), [GENE\\_E\\_SoxB1\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_SoxB1\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_SoxB1} = v_4 + v_{54} - v_{509} \quad (2154)$$

## 8.487 Species mRNA\_E\_SoxC

**Name** mRNA\_E\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_SoxC\\_degradation\\_0](#) and as a product in [GENE\\_E\\_SoxC\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_SoxC\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_SoxC} = v_{55} - v_{511} \quad (2155)$$

### 8.488 Species mRNA\_E\_SuH

**Name** mRNA\_E\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_SuH\\_degradation\\_0](#) and as a product in [E\\_SuH\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_SuH\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_SuH} = v_5 - v_{513} \quad (2156)$$

### 8.489 Species mRNA\_E\_SuTx

**Name** mRNA\_E\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_SuTx\\_degradation\\_0](#) and as a product in [GENE\\_E\\_SuTx\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_SuTx\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_SuTx} = v_{56} - v_{515} \quad (2157)$$

### 8.490 Species mRNA\_E\_TBr

**Name** mRNA\_E\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_TBr\\_degradation\\_0](#) and as a product in [GENE\\_E\\_TBr\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_TBr\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_TBr} = v_{57} - v_{517} \quad (2158)$$

### 8.491 Species mRNA\_E\_Tel

**Name** mRNA\_E\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Tel\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Tel\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Tel\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_E\_Tel} = v_{58} - v_{519} \quad (2159)$$

## 8.492 Species mRNA\_E\_Tgif

**Name** mRNA\_E\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Tgif\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Tgif\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Tgif\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Tgif} = v_{59} - v_{521} \quad (2160)$$

## 8.493 Species mRNA\_E\_UMR

**Name** mRNA\_E\_UMR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_UMR\\_degradation\\_0](#) and as a product in [E\\_UMR\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_UMR\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_UMR} = v_6 - v_{523} \quad (2161)$$

## 8.494 Species mRNA\_E\_UVAOtx

**Name** mRNA\_E\_UVAOtx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_UVAOtx\\_degradation\\_0](#) and as a product in [E\\_UVAOtx\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_UVAOtx\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_UVAOtx} = v_7 - v_{525} \quad (2162)$$

## 8.495 Species mRNA\_E\_UbiqSoxB1

**Name** mRNA\_E\_UbiqSoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_UbiqSoxB1\\_degradation\\_0](#) and as a product in [E\\_UbiqSoxB1\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_UbiqSoxB1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_UbiqSoxB1} = v_8 - v_{527} \quad (2163)$$

## 8.496 Species mRNA\_E\_VEGF

**Name** mRNA\_E\_VEGF

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_VEGF\\_degradation\\_0](#) and as a product in [E\\_VEGF\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_VEGF\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_VEGF} = \boxed{v_9} - \boxed{v_{531}} \quad (2164)$$

## 8.497 Species mRNA\_E\_VEGFR

**Name** mRNA\_E\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_VEGFR\\_degradation\\_0](#) and as a product in [GENE\\_E\\_VEGFR\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_VEGFR\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_VEGFR} = \boxed{v_{60}} - \boxed{v_{529}} \quad (2165)$$

## 8.498 Species mRNA\_E\_Wnt8

**Name** mRNA\_E\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_Wnt8\\_degradation\\_0](#) and as a product in [GENE\\_E\\_Wnt8\\_transcription\\_0](#) and as a modifier in [mRNA\\_E\\_Wnt8\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_Wnt8} = \boxed{v_{61}} - \boxed{v_{533}} \quad (2166)$$

## 8.499 Species mRNA\_E\_cB

**Name** mRNA\_E\_cB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_E\\_cB\\_degradation\\_0](#) and as a product in [E\\_cB\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_E\\_cB\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_E\_cB} = \boxed{v_{10}} - \boxed{v_{535}} \quad (2167)$$

## 8.500 Species mRNA\_E\_z13

**Name** mRNA\_E\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_E_z13_degradation_0` and as a product in `GENE_E_z13_transcription_0` and as a modifier in `mRNA_E_z13_translation_0`).

$$\frac{d}{dt}\text{mRNA\_E\_z13} = v_{62} - v_{537} \quad (2168)$$

## 8.501 Species mRNA\_M\_Alx1

**Name** mRNA\_M\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Alx1_degradation_0` and as a product in `GENE_M_Alx1_transcription_0` and as a modifier in `mRNA_M_Alx1_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_Alx1} = v_{63} - v_{539} \quad (2169)$$

## 8.502 Species mRNA\_M\_Apobec

**Name** mRNA\_M\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Apobec_degradation_0` and as a product in `GENE_M_Apobec_transcription_0` and as a modifier in `mRNA_M_Apobec_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_Apobec} = v_{64} - v_{541} \quad (2170)$$

## 8.503 Species mRNA\_M\_Blimp1

**Name** mRNA\_M\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Blimp1_degradation_0` and as a product in `GENE_M_Blimp1_transcription_0` and as a modifier in `mRNA_M_Blimp1_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_Blimp1} = v_{65} - v_{543} \quad (2171)$$

## 8.504 Species mRNA\_M\_Bra

**Name** mRNA\_M\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Bra\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Bra\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Bra\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Bra} = v_{66} - v_{545} \quad (2172)$$

## 8.505 Species mRNA\_M\_Brn

**Name** mRNA\_M\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Brn\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Brn\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Brn\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Brn} = v_{67} - v_{547} \quad (2173)$$

## 8.506 Species mRNA\_M\_CAPK

**Name** mRNA\_M\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_CAPK\\_degradation\\_0](#) and as a product in [GENE\\_M\\_CAPK\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_CAPK\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_CAPK} = v_{68} - v_{549} \quad (2174)$$

## 8.507 Species mRNA\_M\_CyP

**Name** mRNA\_M\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_CyP\\_degradation\\_0](#) and as a product in [GENE\\_M\\_CyP\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_CyP\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_CyP} = v_{69} - v_{551} \quad (2175)$$

## 8.508 Species mRNA\_M\_Delta

**Name** mRNA\_M\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Delta\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Delta\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Delta\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Delta} = \nu_{70} - \nu_{553} \quad (2176)$$

## 8.509 Species mRNA\_M\_Dpt

**Name** mRNA\_M\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Dpt\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Dpt\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Dpt\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Dpt} = \nu_{71} - \nu_{555} \quad (2177)$$

## 8.510 Species mRNA\_M\_Dri

**Name** mRNA\_M\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Dri\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Dri\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Dri\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Dri} = \nu_{72} - \nu_{557} \quad (2178)$$

## 8.511 Species mRNA\_M\_Endo16

**Name** mRNA\_M\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Endo16\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Endo16\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Endo16\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Endo16} = \nu_{73} - \nu_{559} \quad (2179)$$

## 8.512 Species mRNA\_M\_Erg

**Name** mRNA\_M\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Erg\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Erg\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Erg\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Erg} = \text{v74} - \text{v561} \quad (2180)$$

## 8.513 Species mRNA\_M\_Ets1

**Name** mRNA\_M\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Ets1\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Ets1\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Ets1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Ets1} = \text{v75} - \text{v563} \quad (2181)$$

## 8.514 Species mRNA\_M\_Eve

**Name** mRNA\_M\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Eve\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Eve\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Eve\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Eve} = \text{v76} - \text{v565} \quad (2182)$$

## 8.515 Species mRNA\_M\_Ficolin

**Name** mRNA\_M\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Ficolin\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Ficolin\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Ficolin\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Ficolin} = \text{v77} - \text{v567} \quad (2183)$$

## 8.516 Species mRNA\_M\_FoxA

**Name** mRNA\_M\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_FoxA\\_degradation\\_0](#) and as a product in [GENE\\_M\\_FoxA\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_FoxA\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_FoxA} = v_{78} - v_{569} \quad (2184)$$

## 8.517 Species mRNA\_M\_FoxB

**Name** mRNA\_M\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_FoxB\\_degradation\\_0](#) and as a product in [GENE\\_M\\_FoxB\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_FoxB\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_FoxB} = v_{79} - v_{571} \quad (2185)$$

## 8.518 Species mRNA\_M\_FoxN23

**Name** mRNA\_M\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_FoxN23\\_degradation\\_0](#) and as a product in [GENE\\_M\\_FoxN23\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_FoxN23\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_FoxN23} = v_{80} - v_{573} \quad (2186)$$

## 8.519 Species mRNA\_M\_FoxO

**Name** mRNA\_M\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_FoxO\\_degradation\\_0](#) and as a product in [GENE\\_M\\_FoxO\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_FoxO\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_FoxO} = v_{81} - v_{575} \quad (2187)$$

## 8.520 Species mRNA\_M\_FvMo

**Name** mRNA\_M\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_FvMo\\_degradation\\_0](#) and as a product in [GENE\\_M\\_FvMo\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_FvMo\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_FvMo} = v_{82} - v_{577} \quad (2188)$$

## 8.521 Species mRNA\_M\_GataC

**Name** mRNA\_M\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_GataC\\_degradation\\_0](#) and as a product in [GENE\\_M\\_GataC\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_GataC\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_GataC} = v_{83} - v_{579} \quad (2189)$$

## 8.522 Species mRNA\_M\_GataE

**Name** mRNA\_M\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_GataE\\_degradation\\_0](#) and as a product in [GENE\\_M\\_GataE\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_GataE\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_GataE} = v_{84} - v_{581} \quad (2190)$$

## 8.523 Species mRNA\_M\_Gcad

**Name** mRNA\_M\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [mRNA\\_M\\_Gcad\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Gcad\\_transcription\\_0](#), [M\\_Gcad\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_Gcad\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Gcad} = v_{85} + v_{166} - v_{583} \quad (2191)$$

## 8.524 Species mRNA\_M\_Gcm

**Name** mRNA\_M\_Gcm

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Gcm_degradation_0` and as a product in `GENE_M_Gcm_transcription_0` and as a modifier in `mRNA_M_Gcm_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_Gcm} = v_{86} - v_{585} \quad (2192)$$

## 8.525 Species mRNA\_M\_Gelsolin

**Name** mRNA\_M\_Gelsolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Gelsolin_degradation_0` and as a product in `GENE_M_Gelsolin_transcription_0` and as a modifier in `mRNA_M_Gelsolin_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_Gelsolin} = v_{87} - v_{587} \quad (2193)$$

## 8.526 Species mRNA\_M\_HesC

**Name** mRNA\_M\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_HesC_degradation_0` and as a product in `GENE_M_HesC_transcription_0` and as a modifier in `mRNA_M_HesC_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_HesC} = v_{88} - v_{589} \quad (2194)$$

## 8.527 Species mRNA\_M\_Hex

**Name** mRNA\_M\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Hex_degradation_0` and as a product in `GENE_M_Hex_transcription_0` and as a modifier in `mRNA_M_Hex_translation_0`).

$$\frac{d}{dt}\text{mRNA\_M\_Hex} = v_{89} - v_{591} \quad (2195)$$

## 8.528 Species mRNA\_M\_Hnf6

**Name** mRNA\_M\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Hnf6\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Hnf6\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Hnf6\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Hnf6} = \boxed{v_{90}} - \boxed{v_{593}} \quad (2196)$$

## 8.529 Species mRNA\_M\_Hox

**Name** mRNA\_M\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Hox\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Hox\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Hox\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Hox} = \boxed{v_{91}} - \boxed{v_{595}} \quad (2197)$$

## 8.530 Species mRNA\_M\_Kakapo

**Name** mRNA\_M\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Kakapo\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Kakapo\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Kakapo\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Kakapo} = \boxed{v_{92}} - \boxed{v_{597}} \quad (2198)$$

## 8.531 Species mRNA\_M\_Lim

**Name** mRNA\_M\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Lim\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Lim\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Lim\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Lim} = \boxed{v_{93}} - \boxed{v_{599}} \quad (2199)$$

### 8.532 Species mRNA\_M\_Msp130

**Name** mRNA\_M\_Msp130

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Msp130\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Msp130\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Msp130\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Msp130} = v_{94} - v_{601} \quad (2200)$$

### 8.533 Species mRNA\_M\_MspL

**Name** mRNA\_M\_MspL

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_MspL\\_degradation\\_0](#) and as a product in [GENE\\_M\\_MspL\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_MspL\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_MspL} = v_{95} - v_{603} \quad (2201)$$

### 8.534 Species mRNA\_M\_Not

**Name** mRNA\_M\_Not

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Not\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Not\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Not\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Not} = v_{96} - v_{605} \quad (2202)$$

### 8.535 Species mRNA\_M\_Notch

**Name** mRNA\_M\_Notch

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Notch\\_degradation\\_0](#) and as a product in [M\\_Notch\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_Notch\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Notch} = v_{167} - v_{607} \quad (2203)$$

## 8.536 Species mRNA\_M\_Nrl

**Name** mRNA\_M\_Nrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_M\_Nrl\_degradation\_0 and as a product in GENE\_M\_Nrl\_transcription\_0 and as a modifier in mRNA\_M\_Nrl\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_M\_Nrl} = v_{97} - v_{609} \quad (2204)$$

## 8.537 Species mRNA\_M\_OrCt

**Name** mRNA\_M\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_M\_OrCt\_degradation\_0 and as a product in GENE\_M\_OrCt\_transcription\_0 and as a modifier in mRNA\_M\_OrCt\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_M\_OrCt} = v_{98} - v_{611} \quad (2205)$$

## 8.538 Species mRNA\_M\_Otx

**Name** mRNA\_M\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in mRNA\_M\_Otx\_degradation\_0 and as a product in GENE\_M\_Otx\_transcription\_0, M\_Otx\_Hill\_Kinetic\_0 and as a modifier in mRNA\_M\_Otx\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_M\_Otx} = v_{99} + v_{168} - v_{613} \quad (2206)$$

## 8.539 Species mRNA\_M\_Pks

**Name** mRNA\_M\_Pks

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_M\_Pks\_degradation\_0 and as a product in GENE\_M\_Pks\_transcription\_0 and as a modifier in mRNA\_M\_Pks\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_M\_Pks} = v_{100} - v_{615} \quad (2207)$$

## 8.540 Species mRNA\_M\_Pmar1

**Name** mRNA\_M\_Pmar1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Pmar1\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Pmar1\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Pmar1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Pmar1} = v_{101} - v_{617} \quad (2208)$$

## 8.541 Species mRNA\_M\_Sm27

**Name** mRNA\_M\_Sm27

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Sm27\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Sm27\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Sm27\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Sm27} = v_{102} - v_{619} \quad (2209)$$

## 8.542 Species mRNA\_M\_Sm30

**Name** mRNA\_M\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Sm30\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Sm30\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Sm30\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Sm30} = v_{103} - v_{621} \quad (2210)$$

## 8.543 Species mRNA\_M\_Sm50

**Name** mRNA\_M\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Sm50\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Sm50\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Sm50\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Sm50} = v_{104} - v_{623} \quad (2211)$$

## 8.544 Species mRNA\_M\_Snail

**Name** mRNA\_M\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Snail\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Snail\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Snail\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_Snail} = \boxed{v_{105}} - \boxed{v_{625}} \quad (2212)$$

## 8.545 Species mRNA\_M\_SoxB1

**Name** mRNA\_M\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [mRNA\\_M\\_SoxB1\\_degradation\\_0](#) and as a product in [GENE\\_M\\_SoxB1\\_transcription\\_0](#), [M\\_SoxB1\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_SoxB1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_SoxB1} = \boxed{v_{106}} + \boxed{v_{169}} - \boxed{v_{627}} \quad (2213)$$

## 8.546 Species mRNA\_M\_SoxC

**Name** mRNA\_M\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_SoxC\\_degradation\\_0](#) and as a product in [GENE\\_M\\_SoxC\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_SoxC\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_SoxC} = \boxed{v_{107}} - \boxed{v_{629}} \quad (2214)$$

## 8.547 Species mRNA\_M\_SuH

**Name** mRNA\_M\_SuH

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_SuH\\_degradation\\_0](#) and as a product in [M\\_SuH\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_SuH\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_SuH} = \boxed{v_{170}} - \boxed{v_{631}} \quad (2215)$$

## 8.548 Species mRNA\_M\_SuTx

**Name** mRNA\_M\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_SuTx_degradation_0` and as a product in `GENE_M_SuTx_transcription_0` and as a modifier in `mRNA_M_SuTx_translation_0`).

$$\frac{d}{dt} \text{mRNA\_M\_SuTx} = v_{108} - v_{633} \quad (2216)$$

## 8.549 Species mRNA\_M\_TBr

**Name** mRNA\_M\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_TBr_degradation_0` and as a product in `GENE_M_TBr_transcription_0` and as a modifier in `mRNA_M_TBr_translation_0`).

$$\frac{d}{dt} \text{mRNA\_M\_TBr} = v_{109} - v_{635} \quad (2217)$$

## 8.550 Species mRNA\_M\_Tel

**Name** mRNA\_M\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Tel_degradation_0` and as a product in `GENE_M_Tel_transcription_0` and as a modifier in `mRNA_M_Tel_translation_0`).

$$\frac{d}{dt} \text{mRNA\_M\_Tel} = v_{110} - v_{637} \quad (2218)$$

## 8.551 Species mRNA\_M\_Tgif

**Name** mRNA\_M\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_M_Tgif_degradation_0` and as a product in `GENE_M_Tgif_transcription_0` and as a modifier in `mRNA_M_Tgif_translation_0`).

$$\frac{d}{dt} \text{mRNA\_M\_Tgif} = v_{111} - v_{639} \quad (2219)$$

## 8.552 Species mRNA\_M\_UMADelta

**Name** mRNA\_M\_UMADelta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_UMADelta\\_degradation\\_0](#) and as a product in [M\\_UMADelta\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_UMADelta\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_UMADelta} = v_{171} - v_{641} \quad (2220)$$

## 8.553 Species mRNA\_M\_UMANrl

**Name** mRNA\_M\_UMANrl

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_UMANrl\\_degradation\\_0](#) and as a product in [M\\_UMANrl\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_UMANrl\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_UMANrl} = v_{172} - v_{643} \quad (2221)$$

## 8.554 Species mRNA\_M\_UMR

**Name** mRNA\_M\_UMR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_UMR\\_degradation\\_0](#) and as a product in [M\\_UMR\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_UMR\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_UMR} = v_{173} - v_{645} \quad (2222)$$

## 8.555 Species mRNA\_M\_UbiqSoxB1

**Name** mRNA\_M\_UbiqSoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_UbiqSoxB1\\_degradation\\_0](#) and as a product in [M\\_UbiqSoxB1\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_UbiqSoxB1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_M\_UbiqSoxB1} = v_{174} - v_{647} \quad (2223)$$

## 8.556 Species mRNA\_M\_VEGFR

**Name** mRNA\_M\_VEGFR

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_VEGFR\\_degradation\\_0](#) and as a product in [GENE\\_M\\_VEGFR\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_VEGFR\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_VEGFR} = v_{112} - v_{649} \quad (2224)$$

## 8.557 Species mRNA\_M\_Wnt8

**Name** mRNA\_M\_Wnt8

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_Wnt8\\_degradation\\_0](#) and as a product in [GENE\\_M\\_Wnt8\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_Wnt8\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_Wnt8} = v_{113} - v_{651} \quad (2225)$$

## 8.558 Species mRNA\_M\_cB

**Name** mRNA\_M\_cB

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_cB\\_degradation\\_0](#) and as a product in [M\\_cB\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_M\\_cB\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_cB} = v_{175} - v_{653} \quad (2226)$$

## 8.559 Species mRNA\_M\_z13

**Name** mRNA\_M\_z13

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_M\\_z13\\_degradation\\_0](#) and as a product in [GENE\\_M\\_z13\\_transcription\\_0](#) and as a modifier in [mRNA\\_M\\_z13\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_M\_z13} = v_{114} - v_{655} \quad (2227)$$

## 8.560 Species mRNA\_P\_Alx1

**Name** mRNA\_P\_Alx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_Alx1_degradation_0` and as a product in `GENE_P_Alx1_transcription_0` and as a modifier in `mRNA_P_Alx1_translation_0`).

$$\frac{d}{dt} \text{mRNA\_P\_Alx1} = v_{115} - v_{657} \quad (2228)$$

## 8.561 Species mRNA\_P\_Apobec

**Name** mRNA\_P\_Apobec

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_Apobec_degradation_0` and as a product in `GENE_P_Apobec_transcription_0` and as a modifier in `mRNA_P_Apobec_translation_0`).

$$\frac{d}{dt} \text{mRNA\_P\_Apobec} = v_{116} - v_{659} \quad (2229)$$

## 8.562 Species mRNA\_P\_Blimp1

**Name** mRNA\_P\_Blimp1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_Blimp1_degradation_0` and as a product in `GENE_P_Blimp1_transcription_0` and as a modifier in `mRNA_P_Blimp1_translation_0`).

$$\frac{d}{dt} \text{mRNA\_P\_Blimp1} = v_{117} - v_{661} \quad (2230)$$

## 8.563 Species mRNA\_P\_Bra

**Name** mRNA\_P\_Bra

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_Bra_degradation_0` and as a product in `GENE_P_Bra_transcription_0` and as a modifier in `mRNA_P_Bra_translation_0`).

$$\frac{d}{dt} \text{mRNA\_P\_Bra} = v_{118} - v_{663} \quad (2231)$$

## 8.564 Species mRNA\_P\_Brn

**Name** mRNA\_P\_Brn

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Brn\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Brn\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Brn\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Brn} = \boxed{v_{119}} - \boxed{v_{665}} \quad (2232)$$

## 8.565 Species mRNA\_P\_CAPK

**Name** mRNA\_P\_CAPK

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in two reactions (as a reactant in [mRNA\\_P\\_CAPK\\_degradation\\_0](#) and as a modifier in [mRNA\\_P\\_CAPK\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_CAPK} = - \boxed{v_{667}} \quad (2233)$$

## 8.566 Species mRNA\_P\_CyP

**Name** mRNA\_P\_CyP

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_CyP\\_degradation\\_0](#) and as a product in [GENE\\_P\\_CyP\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_CyP\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_CyP} = \boxed{v_{120}} - \boxed{v_{669}} \quad (2234)$$

## 8.567 Species mRNA\_P\_Delta

**Name** mRNA\_P\_Delta

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Delta\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Delta\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Delta\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Delta} = \boxed{v_{121}} - \boxed{v_{671}} \quad (2235)$$

## 8.568 Species mRNA\_P\_Dpt

**Name** mRNA\_P\_Dpt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Dpt\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Dpt\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Dpt\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Dpt} = v_{122} - v_{673} \quad (2236)$$

## 8.569 Species mRNA\_P\_Dri

**Name** mRNA\_P\_Dri

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Dri\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Dri\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Dri\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Dri} = v_{123} - v_{675} \quad (2237)$$

## 8.570 Species mRNA\_P\_Endo16

**Name** mRNA\_P\_Endo16

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Endo16\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Endo16\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Endo16\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Endo16} = v_{124} - v_{677} \quad (2238)$$

## 8.571 Species mRNA\_P\_Erg

**Name** mRNA\_P\_Erg

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Erg\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Erg\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Erg\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Erg} = v_{125} - v_{679} \quad (2239)$$

## 8.572 Species mRNA\_P\_Ets1

**Name** mRNA\_P\_Ets1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in mRNA\_P\_Ets1\_degradation\_0 and as a product in GENE\_P\_Ets1\_transcription\_0, P\_Ets1\_Hill\_Kinetic\_0 and as a modifier in mRNA\_P\_Ets1\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_P\_Ets1} = v_{126} + v_{407} - v_{681} \quad (2240)$$

## 8.573 Species mRNA\_P\_Eve

**Name** mRNA\_P\_Eve

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_P\_Eve\_degradation\_0 and as a product in GENE\_P\_Eve\_transcription\_0 and as a modifier in mRNA\_P\_Eve\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_P\_Eve} = v_{127} - v_{683} \quad (2241)$$

## 8.574 Species mRNA\_P\_Ficolin

**Name** mRNA\_P\_Ficolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_P\_Ficolin\_degradation\_0 and as a product in GENE\_P\_Ficolin\_transcription\_0 and as a modifier in mRNA\_P\_Ficolin\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_P\_Ficolin} = v_{128} - v_{685} \quad (2242)$$

## 8.575 Species mRNA\_P\_FoxA

**Name** mRNA\_P\_FoxA

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_P\_FoxA\_degradation\_0 and as a product in GENE\_P\_FoxA\_transcription\_0 and as a modifier in mRNA\_P\_FoxA\_translation\_0).

$$\frac{d}{dt}\text{mRNA\_P\_FoxA} = v_{129} - v_{687} \quad (2243)$$

## 8.576 Species mRNA\_P\_FoxB

**Name** mRNA\_P\_FoxB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_FoxB\\_degradation\\_0](#) and as a product in [GENE\\_P\\_FoxB\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_FoxB\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_FoxB} = v_{130} - v_{689} \quad (2244)$$

## 8.577 Species mRNA\_P\_FoxN23

**Name** mRNA\_P\_FoxN23

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_FoxN23\\_degradation\\_0](#) and as a product in [GENE\\_P\\_FoxN23\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_FoxN23\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_FoxN23} = v_{131} - v_{691} \quad (2245)$$

## 8.578 Species mRNA\_P\_FoxO

**Name** mRNA\_P\_FoxO

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_FoxO\\_degradation\\_0](#) and as a product in [GENE\\_P\\_FoxO\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_FoxO\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_FoxO} = v_{132} - v_{693} \quad (2246)$$

## 8.579 Species mRNA\_P\_FvMo

**Name** mRNA\_P\_FvMo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_FvMo\\_degradation\\_0](#) and as a product in [GENE\\_P\\_FvMo\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_FvMo\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_FvMo} = v_{133} - v_{695} \quad (2247)$$

## 8.580 Species mRNA\_P\_GataC

**Name** mRNA\_P\_GataC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_GataC_degradation_0` and as a product in `GENE_P_GataC_transcription_0` and as a modifier in `mRNA_P_GataC_translation_0`).

$$\frac{d}{dt}\text{mRNA\_P\_GataC} = \boxed{v_{134}} - \boxed{v_{697}} \quad (2248)$$

## 8.581 Species mRNA\_P\_GataE

**Name** mRNA\_P\_GataE

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_GataE_degradation_0` and as a product in `GENE_P_GataE_transcription_0` and as a modifier in `mRNA_P_GataE_translation_0`).

$$\frac{d}{dt}\text{mRNA\_P\_GataE} = \boxed{v_{135}} - \boxed{v_{699}} \quad (2249)$$

## 8.582 Species mRNA\_P\_Gcad

**Name** mRNA\_P\_Gcad

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in `mRNA_P_Gcad_degradation_0` and as a product in `GENE_P_Gcad_transcription_0`, `P_Gcad_Hill_Kinetic_0` and as a modifier in `mRNA_P_Gcad_translation_0`).

$$\frac{d}{dt}\text{mRNA\_P\_Gcad} = \boxed{v_{136}} + \boxed{v_{408}} - \boxed{v_{701}} \quad (2250)$$

## 8.583 Species mRNA\_P\_Gcm

**Name** mRNA\_P\_Gcm

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in `mRNA_P_Gcm_degradation_0` and as a product in `GENE_P_Gcm_transcription_0` and as a modifier in `mRNA_P_Gcm_translation_0`).

$$\frac{d}{dt}\text{mRNA\_P\_Gcm} = \boxed{v_{137}} - \boxed{v_{703}} \quad (2251)$$

## 8.584 Species mRNA\_P\_Gelsolin

**Name** mRNA\_P\_Gelsolin

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Gelsolin\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Gelsolin\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Gelsolin\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Gelsolin} = v_{138} - v_{705} \quad (2252)$$

## 8.585 Species mRNA\_P\_HesC

**Name** mRNA\_P\_HesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_HesC\\_degradation\\_0](#) and as a product in [GENE\\_P\\_HesC\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_HesC\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_HesC} = v_{139} - v_{707} \quad (2253)$$

## 8.586 Species mRNA\_P\_Hex

**Name** mRNA\_P\_Hex

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Hex\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Hex\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Hex\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Hex} = v_{140} - v_{709} \quad (2254)$$

## 8.587 Species mRNA\_P\_Hnf6

**Name** mRNA\_P\_Hnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Hnf6\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Hnf6\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Hnf6\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Hnf6} = v_{141} - v_{711} \quad (2255)$$

## 8.588 Species mRNA\_P\_Hox

**Name** mRNA\_P\_Hox

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Hox\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Hox\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Hox\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Hox} = \boxed{v_{142}} - \boxed{v_{713}} \quad (2256)$$

## 8.589 Species mRNA\_P\_Kakapo

**Name** mRNA\_P\_Kakapo

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Kakapo\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Kakapo\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Kakapo\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Kakapo} = \boxed{v_{143}} - \boxed{v_{715}} \quad (2257)$$

## 8.590 Species mRNA\_P\_L1

**Name** mRNA\_P\_L1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_L1\\_degradation\\_0](#) and as a product in [P\\_L1\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_L1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_L1} = \boxed{v_{409}} - \boxed{v_{717}} \quad (2258)$$

## 8.591 Species mRNA\_P\_Lim

**Name** mRNA\_P\_Lim

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Lim\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Lim\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Lim\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Lim} = \boxed{v_{144}} - \boxed{v_{719}} \quad (2259)$$

## 8.592 Species mRNA\_P\_Msp130

**Name** mRNA\_P\_Msp130

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Msp130\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Msp130\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Msp130\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Msp130} = v_{145} - v_{721} \quad (2260)$$

## 8.593 Species mRNA\_P\_MspL

**Name** mRNA\_P\_MspL

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_MspL\\_degradation\\_0](#) and as a product in [GENE\\_P\\_MspL\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_MspL\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_MspL} = v_{146} - v_{723} \quad (2261)$$

## 8.594 Species mRNA\_P\_Not

**Name** mRNA\_P\_Not

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Not\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Not\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Not\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Not} = v_{147} - v_{725} \quad (2262)$$

## 8.595 Species mRNA\_P\_Nrl

**Name** mRNA\_P\_Nrl

**Initial concentration** 0 mol · l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Nrl\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Nrl\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Nrl\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Nrl} = v_{148} - v_{727} \quad (2263)$$

## 8.596 Species mRNA\_P\_OrCt

**Name** mRNA\_P\_OrCt

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_OrCt\\_degradation\\_0](#) and as a product in [GENE\\_P\\_OrCt\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_OrCt\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_OrCt} = v_{149} - v_{729} \quad (2264)$$

## 8.597 Species mRNA\_P\_Otx

**Name** mRNA\_P\_Otx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in four reactions (as a reactant in [mRNA\\_P\\_Otx\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Otx\\_transcription\\_0](#), [P\\_Otx\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_Otx\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Otx} = v_{150} + v_{410} - v_{731} \quad (2265)$$

## 8.598 Species mRNA\_P\_Pks

**Name** mRNA\_P\_Pks

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Pks\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Pks\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Pks\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Pks} = v_{151} - v_{733} \quad (2266)$$

## 8.599 Species mRNA\_P\_Pmar1

**Name** mRNA\_P\_Pmar1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Pmar1\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Pmar1\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Pmar1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Pmar1} = v_{152} - v_{735} \quad (2267)$$

## 8.600 Species mRNA\_P\_Sm27

**Name** mRNA\_P\_Sm27

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Sm27\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Sm27\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Sm27\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Sm27} = v_{153} - v_{737} \quad (2268)$$

## 8.601 Species mRNA\_P\_Sm30

**Name** mRNA\_P\_Sm30

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Sm30\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Sm30\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Sm30\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Sm30} = v_{154} - v_{739} \quad (2269)$$

## 8.602 Species mRNA\_P\_Sm50

**Name** mRNA\_P\_Sm50

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Sm50\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Sm50\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Sm50\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Sm50} = v_{155} - v_{741} \quad (2270)$$

## 8.603 Species mRNA\_P\_Snail

**Name** mRNA\_P\_Snail

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Snail\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Snail\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Snail\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Snail} = v_{156} - v_{743} \quad (2271)$$

## 8.604 Species mRNA\_P\_SoxB1

**Name** mRNA\_P\_SoxB1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_SoxB1\\_degradation\\_0](#) and as a product in [GENE\\_P\\_SoxB1\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_SoxB1\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_SoxB1} = \boxed{v_{157}} - \boxed{v_{745}} \quad (2272)$$

## 8.605 Species mRNA\_P\_SoxC

**Name** mRNA\_P\_SoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_SoxC\\_degradation\\_0](#) and as a product in [GENE\\_P\\_SoxC\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_SoxC\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_SoxC} = \boxed{v_{158}} - \boxed{v_{747}} \quad (2273)$$

## 8.606 Species mRNA\_P\_SuTx

**Name** mRNA\_P\_SuTx

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_SuTx\\_degradation\\_0](#) and as a product in [GENE\\_P\\_SuTx\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_SuTx\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_SuTx} = \boxed{v_{159}} - \boxed{v_{749}} \quad (2274)$$

## 8.607 Species mRNA\_P\_TBr

**Name** mRNA\_P\_TBr

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_TBr\\_degradation\\_0](#) and as a product in [GENE\\_P\\_TBr\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_TBr\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_TBr} = \boxed{v_{160}} - \boxed{v_{751}} \quad (2275)$$

## 8.608 Species mRNA\_P\_Tel

**Name** mRNA\_P\_Tel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Tel\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Tel\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Tel\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Tel} = v_{161} - v_{753} \quad (2276)$$

## 8.609 Species mRNA\_P\_Tgif

**Name** mRNA\_P\_Tgif

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Tgif\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Tgif\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Tgif\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_Tgif} = v_{162} - v_{755} \quad (2277)$$

## 8.610 Species mRNA\_P\_UbiqAlx1

**Name** mRNA\_P\_UbiqAlx1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqAlx1\\_degradation\\_0](#) and as a product in [P\\_UbiqAlx1\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqAlx1\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_UbiqAlx1} = v_{411} - v_{757} \quad (2278)$$

## 8.611 Species mRNA\_P\_UbiqES

**Name** mRNA\_P\_UbiqES

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqES\\_degradation\\_0](#) and as a product in [P\\_UbiqES\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqES\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_UbiqES} = v_{412} - v_{759} \quad (2279)$$

## 8.612 Species mRNA\_P\_UbiqEts1

**Name** mRNA\_P\_UbiqEts1

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqEts1\\_degradation\\_0](#) and as a product in [P\\_UbiqEts1\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqEts1\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_UbiqEts1} = v_{413} - v_{761} \quad (2280)$$

## 8.613 Species mRNA\_P\_UbiqHesC

**Name** mRNA\_P\_UbiqHesC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqHesC\\_degradation\\_0](#) and as a product in [P\\_UbiqHesC\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqHesC\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_UbiqHesC} = v_{414} - v_{763} \quad (2281)$$

## 8.614 Species mRNA\_P\_UbiqHnf6

**Name** mRNA\_P\_UbiqHnf6

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqHnf6\\_degradation\\_0](#) and as a product in [P\\_UbiqHnf6\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqHnf6\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_UbiqHnf6} = v_{415} - v_{765} \quad (2282)$$

## 8.615 Species mRNA\_P\_UbiqSoxC

**Name** mRNA\_P\_UbiqSoxC

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqSoxC\\_degradation\\_0](#) and as a product in [P\\_UbiqSoxC\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqSoxC\\_translation\\_0](#)).

$$\frac{d}{dt} \text{mRNA\_P\_UbiqSoxC} = v_{416} - v_{767} \quad (2283)$$

## 8.616 Species mRNA\_P\_UbiqTel

**Name** mRNA\_P\_UbiqTel

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_UbiqTel\\_degradation\\_0](#) and as a product in [P\\_UbiqTel\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_UbiqTel\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_UbiqTel} = \text{v}_{417} - \text{v}_{769} \quad (2284)$$

## 8.617 Species mRNA\_P\_VEGFR

**Name** mRNA\_P\_VEGFR

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_VEGFR\\_degradation\\_0](#) and as a product in [GENE\\_P\\_VEGFR\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_VEGFR\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_VEGFR} = \text{v}_{163} - \text{v}_{771} \quad (2285)$$

## 8.618 Species mRNA\_P\_Wnt8

**Name** mRNA\_P\_Wnt8

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_Wnt8\\_degradation\\_0](#) and as a product in [GENE\\_P\\_Wnt8\\_transcription\\_0](#) and as a modifier in [mRNA\\_P\\_Wnt8\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_Wnt8} = \text{v}_{164} - \text{v}_{773} \quad (2286)$$

## 8.619 Species mRNA\_P\_cB

**Name** mRNA\_P\_cB

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in [mRNA\\_P\\_cB\\_degradation\\_0](#) and as a product in [P\\_cB\\_Hill\\_Kinetic\\_0](#) and as a modifier in [mRNA\\_P\\_cB\\_translation\\_0](#)).

$$\frac{d}{dt}\text{mRNA\_P\_cB} = \text{v}_{418} - \text{v}_{775} \quad (2287)$$

## 8.620 Species mRNA\_P\_z13

**Name** mRNA\_P\_z13

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in three reactions (as a reactant in mRNA\_P\_z13\_degradation\_0 and as a product in GENE\_P\_z13\_transcription\_0 and as a modifier in mRNA\_P\_z13\_translation\_0).

$$\frac{d}{dt} \text{mRNA\_P\_z13} = v_{165} - v_{777} \quad (2288)$$

## 8.621 Species ribosome

**Name** ribosome

**Initial concentration** 1 mol·l<sup>-1</sup>

$$\frac{d}{dt} \text{ribosome} = 0 \quad (2289)$$

## 8.622 Species none

**Name** none

**Initial concentration** 0 mol·l<sup>-1</sup>

This species takes part in 899 reactions (as a reactant in mRNA\_E\_Alx1\_translation\_0, mRNA\_E\_Apobec\_translation\_0, mRNA\_E\_Blimp1\_translation\_0, mRNA\_E\_Bra\_translation\_0, mRNA\_E\_Brn\_translation\_0, mRNA\_E\_CAPK\_translation\_0, mRNA\_E\_CyP\_translation\_0, mRNA\_E\_Delta\_translation\_0, mRNA\_E\_Dpt\_translation\_0, mRNA\_E\_Dri\_translation\_0, mRNA\_E\_ES\_translation\_0, mRNA\_E\_Endo16\_translation\_0, mRNA\_E\_Erg\_translation\_0, mRNA\_E\_Ets1\_translation\_0, mRNA\_E\_Eve\_translation\_0, mRNA\_E\_Ficolin\_translation\_0, mRNA\_E\_FoxA\_translation\_0, mRNA\_E\_FoxB\_translation\_0, mRNA\_E\_FoxN23\_translation\_0, mRNA\_E\_FoxO\_translation\_0, mRNA\_E\_FvMo\_translation\_0, mRNA\_E\_GataC\_translation\_0, mRNA\_E\_GataE\_translation\_0, mRNA\_E\_Gcad\_translation\_0, mRNA\_E\_Gcm\_translation\_0, mRNA\_E\_Gelsolin\_translation\_0, mRNA\_E\_HesC\_translation\_0, mRNA\_E\_Hex\_translation\_0, mRNA\_E\_Hnf6\_translation\_0, mRNA\_E\_Hox\_translation\_0, mRNA\_E\_Kakapo\_translation\_0, mRNA\_E\_Lim\_translation\_0, mRNA\_E\_Msp130\_translation\_0, mRNA\_E\_MspL\_translation\_0, mRNA\_E\_Not\_translation\_0, mRNA\_E\_Notch\_translation\_0, mRNA\_E\_Nrl\_translation\_0, mRNA\_E\_OrCt\_translation\_0, mRNA\_E\_Otx\_translation\_0, mRNA\_E\_Pks\_translation\_0, mRNA\_E\_Pmar1\_translation\_0, mRNA\_E\_Sm27\_translation\_0, mRNA\_E\_Sm30\_translation\_0, mRNA\_E\_Sm50\_translation\_0, mRNA\_E\_Snail\_translation\_0, mRNA\_E\_SoxB1\_translation\_0, mRNA\_E\_SoxC\_translation\_0, mRNA\_E\_SuH\_translation\_0, mRNA\_E\_SuTx\_translation\_0, mRNA\_E\_TBr\_translation\_0, mRNA\_E\_Tel\_translation\_0, mRNA\_E\_Tgif\_translation\_0, mRNA\_E\_UMR\_translation\_0, mRNA\_E\_UVA0tx\_translation\_0, mRNA\_E\_UbiqSoxB1\_translation\_0, mRNA\_E\_VEGFR\_translation\_0, mRNA\_E\_VEGF\_translation\_0, mRNA\_E\_Wnt8\_translation\_0).

$_0$ , mRNA\_E\_cB\_translation\_0, mRNA\_E\_z13\_translation\_0, mRNA\_M\_Alx1\_translation\_0, mRNA\_M\_Apobec\_translation\_0, mRNA\_M\_Blimp1\_translation\_0, mRNA\_M\_Bra\_translation\_0, mRNA\_M\_Brn\_translation\_0, mRNA\_M\_CAPK\_translation\_0, mRNA\_M\_CyP\_translation\_0, mRNA\_M\_Delta\_translation\_0, mRNA\_M\_Dpt\_translation\_0, mRNA\_M\_Dri\_translation\_0, mRNA\_M\_Endo16\_translation\_0, mRNA\_M\_Erg\_translation\_0, mRNA\_M\_Ets1\_translation\_0, mRNA\_M\_Eve\_translation\_0, mRNA\_M\_Ficolin\_translation\_0, mRNA\_M\_FoxA\_translation\_0, mRNA\_M\_FoxB\_translation\_0, mRNA\_M\_FoxN23\_translation\_0, mRNA\_M\_FoxO\_translation\_0, mRNA\_M\_FvMo\_translation\_0, mRNA\_M\_GataC\_translation\_0, mRNA\_M\_GataE\_translation\_0, mRNA\_M\_Gcad\_translation\_0, mRNA\_M\_Gcm\_translation\_0, mRNA\_M\_Gelsolin\_translation\_0, mRNA\_M\_HesC\_translation\_0, mRNA\_M\_Hex\_translation\_0, mRNA\_M\_Hnf6\_translation\_0, mRNA\_M\_Hox\_translation\_0, mRNA\_M\_Kakapo\_translation\_0, mRNA\_M\_Lim\_translation\_0, mRNA\_M\_Msp130\_translation\_0, mRNA\_M\_MspL\_translation\_0, mRNA\_M\_Not\_translation\_0, mRNA\_M\_Notch\_translation\_0, mRNA\_M\_Nrl\_translation\_0, mRNA\_M\_OrCt\_translation\_0, mRNA\_M\_Otx\_translation\_0, mRNA\_M\_Pks\_translation\_0, mRNA\_M\_Pmar1\_translation\_0, mRNA\_M\_Sm27\_translation\_0, mRNA\_M\_Sm30\_translation\_0, mRNA\_M\_Sm50\_translation\_0, mRNA\_M\_Snail\_translation\_0, mRNA\_M\_SoXB1\_translation\_0, mRNA\_M\_SoXC\_translation\_0, mRNA\_M\_SuH\_translation\_0, mRNA\_M\_SuTx\_translation\_0, mRNA\_M\_TBr\_translation\_0, mRNA\_M\_Tel\_translation\_0, mRNA\_M\_Tgif\_translation\_0, mRNA\_M\_UMADelta\_translation\_0, mRNA\_M\_UMANrl\_translation\_0, mRNA\_M\_UMR\_translation\_0, mRNA\_M\_UbiqSoXB1\_translation\_0, mRNA\_M\_VEGFR\_translation\_0, mRNA\_M\_Wnt8\_translation\_0, mRNA\_M\_cB\_translation\_0, mRNA\_M\_z13\_translation\_0, mRNA\_P\_Alx1\_translation\_0, mRNA\_P\_Apobec\_translation\_0, mRNA\_P\_Blimp1\_translation\_0, mRNA\_P\_Bra\_translation\_0, mRNA\_P\_Brn\_translation\_0, mRNA\_P\_CAPK\_translation\_0, mRNA\_P\_CyP\_translation\_0, mRNA\_P\_Delta\_translation\_0, mRNA\_P\_Dpt\_translation\_0, mRNA\_P\_Dri\_translation\_0, mRNA\_P\_Endo16\_translation\_0, mRNA\_P\_Erg\_translation\_0, mRNA\_P\_Ets1\_translation\_0, mRNA\_P\_Eve\_translation\_0, mRNA\_P\_Ficolin\_translation\_0, mRNA\_P\_FoxA\_translation\_0, mRNA\_P\_FoxB\_translation\_0, mRNA\_P\_FoxN23\_translation\_0, mRNA\_P\_FoxO\_translation\_0, mRNA\_P\_FvMo\_translation\_0, mRNA\_P\_GataC\_translation\_0, mRNA\_P\_GataE\_translation\_0, mRNA\_P\_Gcad\_translation\_0, mRNA\_P\_Gcm\_translation\_0, mRNA\_P\_Gelsolin\_translation\_0, mRNA\_P\_HesC\_translation\_0, mRNA\_P\_Hex\_translation\_0, mRNA\_P\_Hnf6\_translation\_0, mRNA\_P\_Hox\_translation\_0, mRNA\_P\_Kakapo\_translation\_0, mRNA\_P\_L1\_translation\_0, mRNA\_P\_Lim\_translation\_0, mRNA\_P\_Msp130\_translation\_0, mRNA\_P\_MspL\_translation\_0, mRNA\_P\_Not\_translation\_0, mRNA\_P\_Nrl\_translation\_0, mRNA\_P\_OrCt\_translation\_0, mRNA\_P\_Otx\_translation\_0, mRNA\_P\_Pks\_translation\_0, mRNA\_P\_Pmar1\_translation\_0, mRNA\_P\_Sm27\_translation\_0, mRNA\_P\_Sm30\_translation\_0, mRNA\_P\_Sm50\_translation\_0, mRNA\_P\_Snail\_translation\_0, mRNA\_P\_SoXB1\_translation\_0, mRNA\_P\_SoXC\_translation\_0, mRNA\_P\_SuTx\_translation\_0, mRNA\_P\_TBr\_translation\_0, mRNA\_P\_Tel\_translation\_0, mRNA\_P\_Tgif\_translation\_0, mRNA\_P\_UbiqAlx1\_translation\_0, mRNA\_P\_UbiqES\_translation\_0, mRNA\_P\_UbiqEts1\_translation\_0, mRNA\_P\_UbiqHesC\_translation\_0, mRNA\_P\_UbiqHnf6\_translation\_0, mRNA\_P\_UbiqSoXC\_translation\_0, mRNA\_P\_UbiqTel\_translation\_0, mRNA\_P\_VEGFR\_translation\_0, mRNA\_P\_Wnt8\_translation\_0, mRNA\_P\_cB\_translation\_0, mRNA\_P\_z13\_translation\_0 and as a product in PROTEIN\_E\_Alx1\_degradation\_0, PROTEIN\_E\_Apobec\_degradation\_0, PROTEIN\_E\_Blimp1\_degradation\_0, PROTEIN\_E\_Bra\_degradation\_0, PROTEIN\_E\_Brn\_

\_degradation\_0, PROTEIN\_E\_CAPK\_degradation\_0, PROTEIN\_E\_CyP\_degradation\_0, PROTEIN\_E\_Delta\_degradation\_0, PROTEIN\_E\_Dpt\_degradation\_0, PROTEIN\_E\_Dri\_degradation\_0, PROTEIN\_E\_ES\_degradation\_0, PROTEIN\_E\_Endo16\_degradation\_0, PROTEIN\_E\_Erg\_degradation\_0, PROTEIN\_E\_Ets1\_degradation\_0, PROTEIN\_E\_Eve\_degradation\_0, PROTEIN\_E\_Ficolin\_degradation\_0, PROTEIN\_E\_FoxA\_degradation\_0, PROTEIN\_E\_FoxB\_degradation\_0, PROTEIN\_E\_FoxN23\_degradation\_0, PROTEIN\_E\_FoxO\_degradation\_0, PROTEIN\_E\_FvMo\_degradation\_0, PROTEIN\_E\_GataC\_degradation\_0, PROTEIN\_E\_GataE\_degradation\_0, PROTEIN\_E\_Gcad\_degradation\_0, PROTEIN\_E\_Gcm\_degradation\_0, PROTEIN\_E\_Gelsolin\_degradation\_0, PROTEIN\_E\_HesC\_degradation\_0, PROTEIN\_E\_Hex\_degradation\_0, PROTEIN\_E\_Hnf6\_degradation\_0, PROTEIN\_E\_Hox\_degradation\_0, PROTEIN\_E\_Kakapo\_degradation\_0, PROTEIN\_E\_Lim\_degradation\_0, PROTEIN\_E\_Msp130\_degradation\_0, PROTEIN\_E\_MspL\_degradation\_0, PROTEIN\_E\_Not\_degradation\_0, PROTEIN\_E\_Notch\_degradation\_0, PROTEIN\_E\_Nrl\_degradation\_0, PROTEIN\_E\_OrCt\_degradation\_0, PROTEIN\_E\_Otx\_degradation\_0, PROTEIN\_E\_Pks\_degradation\_0, PROTEIN\_E\_Pmar1\_degradation\_0, PROTEIN\_E\_Sm27\_degradation\_0, PROTEIN\_E\_Sm30\_degradation\_0, PROTEIN\_E\_Sm50\_degradation\_0, PROTEIN\_E\_Snail\_degradation\_0, PROTEIN\_E\_SoxB1\_degradation\_0, PROTEIN\_E\_SoxC\_degradation\_0, PROTEIN\_E\_SuH\_degradation\_0, PROTEIN\_E\_SuTx\_degradation\_0, PROTEIN\_E\_TBr\_degradation\_0, PROTEIN\_E\_Tel\_degradation\_0, PROTEIN\_E\_Tgif\_degradation\_0, PROTEIN\_E\_UMR\_degradation\_0, PROTEIN\_E\_UVA0tx\_degradation\_0, PROTEIN\_E\_UbiqSoxB1\_degradation\_0, PROTEIN\_E\_VEGFR\_degradation\_0, PROTEIN\_E\_VEGF\_degradation\_0, PROTEIN\_E\_Wnt8\_degradation\_0, PROTEIN\_E\_cB\_degradation\_0, PROTEIN\_E\_z13\_degradation\_0, PROTEIN\_M\_Alx1\_degradation\_0, PROTEIN\_M\_Apobec\_degradation\_0, PROTEIN\_M\_Blimp1\_degradation\_0, PROTEIN\_M\_Bra\_degradation\_0, PROTEIN\_M\_Brn\_degradation\_0, PROTEIN\_M\_CAPK\_degradation\_0, PROTEIN\_M\_CyP\_degradation\_0, PROTEIN\_M\_Delta\_degradation\_0, PROTEIN\_M\_Dpt\_degradation\_0, PROTEIN\_M\_Dri\_degradation\_0, PROTEIN\_M\_Endo16\_degradation\_0, PROTEIN\_M\_Erg\_degradation\_0, PROTEIN\_M\_Ets1\_degradation\_0, PROTEIN\_M\_Eve\_degradation\_0, PROTEIN\_M\_Ficolin\_degradation\_0, PROTEIN\_M\_FoxA\_degradation\_0, PROTEIN\_M\_FoxB\_degradation\_0, PROTEIN\_M\_FoxN23\_degradation\_0, PROTEIN\_M\_FoxO\_degradation\_0, PROTEIN\_M\_FvMo\_degradation\_0, PROTEIN\_M\_GataC\_degradation\_0, PROTEIN\_M\_GataE\_degradation\_0, PROTEIN\_M\_Gcad\_degradation\_0, PROTEIN\_M\_Gcm\_degradation\_0, PROTEIN\_M\_Gelsolin\_degradation\_0, PROTEIN\_M\_HesC\_degradation\_0, PROTEIN\_M\_Hex\_degradation\_0, PROTEIN\_M\_Hnf6\_degradation\_0, PROTEIN\_M\_Hox\_degradation\_0, PROTEIN\_M\_Kakapo\_degradation\_0, PROTEIN\_M\_Lim\_degradation\_0, PROTEIN\_M\_Msp130\_degradation\_0, PROTEIN\_M\_MspL\_degradation\_0, PROTEIN\_M\_Not\_degradation\_0, PROTEIN\_M\_Notch\_degradation\_0, PROTEIN\_M\_Nrl\_degradation\_0, PROTEIN\_M\_OrCt\_degradation\_0, PROTEIN\_M\_Otx\_degradation\_0, PROTEIN\_M\_Pks\_degradation\_0, PROTEIN\_M\_Pmar1\_degradation\_0, PROTEIN\_M\_Sm27\_degradation\_0, PROTEIN\_M\_Sm30\_degradation\_0, PROTEIN\_M\_Sm50\_degradation\_0, PROTEIN\_M\_Snail\_degradation\_0, PROTEIN\_M\_SoxB1\_degradation\_0, PROTEIN\_M\_SoxC\_degradation\_0, PROTEIN\_M\_SuH\_degradation\_0, PROTEIN\_M\_SuTx\_degradation\_0, PROTEIN\_M\_TBr\_degradation\_0, PROTEIN\_M\_Tel\_degradation\_0, PROTEIN\_M\_Tgif\_degradation\_0, PROTEIN\_M\_UMADelta\_degradation\_0, PROTEIN\_M\_UMANrl\_degradation\_0, PROTEIN\_M\_UMR\_degradation\_0, PROTEIN\_M\_UbiqSoxB1\_degradation\_0, PROTEIN\_M\_VEGFR\_degradation\_0, PROTEIN\_M\_Wnt8\_degradation\_0, PROTEIN\_M\_cB\_degradation\_0, PROTEIN\_M\_z13\_degradation\_0, PROTEIN\_P\_Alx1\_degradation\_0

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\_E\_Delta\_degradation\_0, PROTEIN\_E\_Dpt\_degradation\_0, PROTEIN\_E\_Dri\_degradation\_0, PROTEIN\_E\_ES\_degradation\_0, PROTEIN\_E\_Endo16\_degradation\_0, PROTEIN\_E\_Erg\_degradation\_0, PROTEIN\_E\_Ets1\_degradation\_0, PROTEIN\_E\_Eve\_degradation\_0, PROTEIN\_E\_Ficolin\_degradation\_0, PROTEIN\_E\_FoxA\_degradation\_0, PROTEIN\_E\_FoxB\_degradation\_0, PROTEIN\_E\_FoxN23\_degradation\_0, PROTEIN\_E\_FoxO\_degradation\_0, PROTEIN\_E\_FvMo\_degradation\_0, PROTEIN\_E\_GataC\_degradation\_0, PROTEIN\_E\_GataE\_degradation\_0, PROTEIN\_E\_Gcad\_degradation\_0, PROTEIN\_E\_Gcm\_degradation\_0, PROTEIN\_E\_Gelsolin\_degradation\_0, PROTEIN\_E\_HesC\_degradation\_0, PROTEIN\_E\_Hex\_degradation\_0, PROTEIN\_E\_Hnf6\_degradation\_0, PROTEIN\_E\_Hox\_degradation\_0, PROTEIN\_E\_Kakapo\_degradation\_0, PROTEIN\_E\_Lim\_degradation\_0, PROTEIN\_E\_Msp130\_degradation\_0, PROTEIN\_E\_MspL\_degradation\_0, PROTEIN\_E\_Not\_degradation\_0, PROTEIN\_E\_Notch\_degradation\_0, PROTEIN\_E\_Nrl\_degradation\_0, PROTEIN\_E\_OrCt\_degradation\_0, PROTEIN\_E\_Otx\_degradation\_0, PROTEIN\_E\_Pks\_degradation\_0, PROTEIN\_E\_Pmar1\_degradation\_0, PROTEIN\_E\_Sm27\_degradation\_0, PROTEIN\_E\_Sm30\_degradation\_0, PROTEIN\_E\_Sm50\_degradation\_0, PROTEIN\_E\_Snail\_degradation\_0, PROTEIN\_E\_SoxB1\_degradation\_0, PROTEIN\_E\_SoxC\_degradation\_0, PROTEIN\_E\_SuH\_degradation\_0, PROTEIN\_E\_SuTx\_degradation\_0, PROTEIN\_E\_TBr\_degradation\_0, PROTEIN\_E\_Tel\_degradation\_0, PROTEIN\_E\_Tgif\_degradation\_0, PROTEIN\_E\_UMR\_degradation\_0, PROTEIN\_E\_UVAOtx\_degradation\_0, PROTEIN\_E\_UbiqSoxB1\_degradation\_0, PROTEIN\_E\_VEGFR\_degradation\_0, PROTEIN\_E\_VEGF\_degradation\_0, PROTEIN\_E\_Wnt8\_degradation\_0, PROTEIN\_E\_cB\_degradation\_0, PROTEIN\_E\_z13\_degradation\_0, PROTEIN\_M\_Alx1\_degradation\_0, PROTEIN\_M\_Apobec\_degradation\_0, PROTEIN\_M\_Blimp1\_degradation\_0, PROTEIN\_M\_Bra\_degradation\_0, PROTEIN\_M\_Brn\_degradation\_0, PROTEIN\_M\_CAPK\_degradation\_0, PROTEIN\_M\_CyP\_degradation\_0, PROTEIN\_M\_Delta\_degradation\_0, PROTEIN\_M\_Dpt\_degradation\_0, PROTEIN\_M\_Dri\_degradation\_0, PROTEIN\_M\_Endo16\_degradation\_0, PROTEIN\_M\_Erg\_degradation\_0, PROTEIN\_M\_Ets1\_degradation\_0, PROTEIN\_M\_Eve\_degradation\_0, PROTEIN\_M\_Ficolin\_degradation\_0, PROTEIN\_M\_FoxA\_degradation\_0, PROTEIN\_M\_FoxB\_degradation\_0, PROTEIN\_M\_FoxN23\_degradation\_0, PROTEIN\_M\_FoxO\_degradation\_0, PROTEIN\_M\_FvMo\_degradation\_0, PROTEIN\_M\_GataC\_degradation\_0, PROTEIN\_M\_GataE\_degradation\_0, PROTEIN\_M\_Gcad\_degradation\_0, PROTEIN\_M\_Gcm\_degradation\_0, PROTEIN\_M\_Gelsolin\_degradation\_0, PROTEIN\_M\_HesC\_degradation\_0, PROTEIN\_M\_Hex\_degradation\_0, PROTEIN\_M\_Hnf6\_degradation\_0, PROTEIN\_M\_Hox\_degradation\_0, PROTEIN\_M\_Kakapo\_degradation\_0, PROTEIN\_M\_Lim\_degradation\_0, PROTEIN\_M\_Msp130\_degradation\_0, PROTEIN\_M\_MspL\_degradation\_0, PROTEIN\_M\_Not\_degradation\_0, PROTEIN\_M\_Notch\_degradation\_0, PROTEIN\_M\_Nrl\_degradation\_0, PROTEIN\_M\_OrCt\_degradation\_0, PROTEIN\_M\_Otx\_degradation\_0, PROTEIN\_M\_Pks\_degradation\_0, PROTEIN\_M\_Pmar1\_degradation\_0, PROTEIN\_M\_Sm27\_degradation\_0, PROTEIN\_M\_Sm30\_degradation\_0, PROTEIN\_M\_Sm50\_degradation\_0, PROTEIN\_M\_Snail\_degradation\_0, PROTEIN\_M\_SoxB1\_degradation\_0, PROTEIN\_M\_SoxC\_degradation\_0, PROTEIN\_M\_SuH\_degradation\_0, PROTEIN\_M\_SuTx\_degradation\_0, PROTEIN\_M\_TBr\_degradation\_0, PROTEIN\_M\_Tel\_degradation\_0, PROTEIN\_M\_Tgif\_degradation\_0, PROTEIN\_M\_UMADelta\_degradation\_0, PROTEIN\_M\_UMANrl\_degradation\_0, PROTEIN\_M\_UMR\_degradation\_0, PROTEIN\_M\_UbiqSoxB1\_degradation\_0, PROTEIN\_M\_VEGFR\_degradation\_0, PROTEIN\_M\_Wnt8\_degradation\_0, PROTEIN\_M\_cB\_degradation\_0, PROTEIN\_M\_z13\_degradation\_0, PROTEIN\_P\_Alx1\_degradation\_0, PROTEIN\_P\_Apobec\_degradation\_0, PROTEIN\_P\_Blimp1\_degradation\_0, PROTEIN\_P\_

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\_0, mRNA\_E\_cB\_degradation\_0, mRNA\_E\_z13\_degradation\_0, mRNA\_M\_Alx1\_degradation-  
\_0, mRNA\_M\_Apobec\_degradation\_0, mRNA\_M\_Blimp1\_degradation\_0, mRNA\_M\_Bra\_degradation-

\_0, mRNA\_M\_Brn\_degradation\_0, mRNA\_M\_CAPK\_degradation\_0, mRNA\_M\_CyP\_degradation-\_0, mRNA\_M\_Delta\_degradation\_0, mRNA\_M\_Dpt\_degradation\_0, mRNA\_M\_Dri\_degradation-\_0, mRNA\_M\_Endo16\_degradation\_0, mRNA\_M\_Erg\_degradation\_0, mRNA\_M\_Ets1\_degradation-\_0, mRNA\_M\_Eve\_degradation\_0, mRNA\_M\_Ficolin\_degradation\_0, mRNA\_M\_FoxA\_degradation-\_0, mRNA\_M\_FoxB\_degradation\_0, mRNA\_M\_FoxN23\_degradation\_0, mRNA\_M\_FoxO\_degradation-\_0, mRNA\_M\_FvMo\_degradation\_0, mRNA\_M\_GataC\_degradation\_0, mRNA\_M\_GataE\_degradation-\_0, mRNA\_M\_Gcad\_degradation\_0, mRNA\_M\_Gcm\_degradation\_0, mRNA\_M\_Gelsolin\_degradation-\_0, mRNA\_M\_HesC\_degradation\_0, mRNA\_M\_Hex\_degradation\_0, mRNA\_M\_Hnf6\_degradation-\_0, mRNA\_M\_Hox\_degradation\_0, mRNA\_M\_Kakapo\_degradation\_0, mRNA\_M\_Lim\_degradation-\_0, mRNA\_M\_Msp130\_degradation\_0, mRNA\_M\_MspL\_degradation\_0, mRNA\_M\_Not\_degradation-\_0, mRNA\_M\_Notch\_degradation\_0, mRNA\_M\_Nrl\_degradation\_0, mRNA\_M\_OrCt\_degradation-\_0, mRNA\_M\_Otx\_degradation\_0, mRNA\_M\_Pks\_degradation\_0, mRNA\_M\_Pmar1\_degradation-\_0, mRNA\_M\_Sm27\_degradation\_0, mRNA\_M\_Sm30\_degradation\_0, mRNA\_M\_Sm50\_degradation-\_0, mRNA\_M\_Snail\_degradation\_0, mRNA\_M\_SoxB1\_degradation\_0, mRNA\_M\_SoxC\_degradation-\_0, mRNA\_M\_SuH\_degradation\_0, mRNA\_M\_SuTx\_degradation\_0, mRNA\_M\_TBr\_degradation-\_0, mRNA\_M\_Tel\_degradation\_0, mRNA\_M\_Tgif\_degradation\_0, mRNA\_M\_UMADelta\_degradation-\_0, mRNA\_M\_UMANrl\_degradation\_0, mRNA\_M\_UMR\_degradation\_0, mRNA\_M\_UbiqSoxB1\_degradation-\_0, mRNA\_M\_VEGFR\_degradation\_0, mRNA\_M\_Wnt8\_degradation\_0, mRNA\_M\_cB\_degradation-\_0, mRNA\_P\_z13\_degradation\_0, mRNA\_P\_Alx1\_degradation\_0, mRNA\_P\_Apobec\_degradation-\_0, mRNA\_P\_Blimp1\_degradation\_0, mRNA\_P\_Bra\_degradation\_0, mRNA\_P\_Brn\_degradation-\_0, mRNA\_P\_CAPK\_degradation\_0, mRNA\_P\_CyP\_degradation\_0, mRNA\_P\_Delta\_degradation-\_0, mRNA\_P\_Dpt\_degradation\_0, mRNA\_P\_Dri\_degradation\_0, mRNA\_P\_Endo16\_degradation-\_0, mRNA\_P\_Erg\_degradation\_0, mRNA\_P\_Ets1\_degradation\_0, mRNA\_P\_Eve\_degradation-\_0, mRNA\_P\_Ficolin\_degradation\_0, mRNA\_P\_FoxA\_degradation\_0, mRNA\_P\_FoxB\_degradation-\_0, mRNA\_P\_FoxN23\_degradation\_0, mRNA\_P\_FoxO\_degradation\_0, mRNA\_P\_FvMo\_degradation-\_0, mRNA\_P\_GataC\_degradation\_0, mRNA\_P\_GataE\_degradation\_0, mRNA\_P\_Gcad\_degradation-\_0, mRNA\_P\_Gcm\_degradation\_0, mRNA\_P\_Gelsolin\_degradation\_0, mRNA\_P\_HesC\_degradation-\_0, mRNA\_P\_Hex\_degradation\_0, mRNA\_P\_Hnf6\_degradation\_0, mRNA\_P\_Hox\_degradation-\_0, mRNA\_P\_Kakapo\_degradation\_0, mRNA\_P\_L1\_degradation\_0, mRNA\_P\_Lim\_degradation-\_0, mRNA\_P\_Msp130\_degradation\_0, mRNA\_P\_MspL\_degradation\_0, mRNA\_P\_Not\_degradation-\_0, mRNA\_P\_Nrl\_degradation\_0, mRNA\_P\_OrCt\_degradation\_0, mRNA\_P\_Otx\_degradation-\_0, mRNA\_P\_Pks\_degradation\_0, mRNA\_P\_Pmar1\_degradation\_0, mRNA\_P\_Sm27\_degradation-\_0, mRNA\_P\_Sm30\_degradation\_0, mRNA\_P\_Sm50\_degradation\_0, mRNA\_P\_Snail\_degradation-\_0, mRNA\_P\_SoxB1\_degradation\_0, mRNA\_P\_SoxC\_degradation\_0, mRNA\_P\_SuTx\_degradation-\_0, mRNA\_P\_TBr\_degradation\_0, mRNA\_P\_Tel\_degradation\_0, mRNA\_P\_Tgif\_degradation-\_0, mRNA\_P\_UbiqAlx1\_degradation\_0, mRNA\_P\_UbiqES\_degradation\_0, mRNA\_P\_UbiqEts1\_degradation\_0, mRNA\_P\_UbiqHesC\_degradation\_0, mRNA\_P\_UbiqHnf6\_degradation\_0, mRNA\_P\_UbiqSoxC\_degradation\_0, mRNA\_P\_UbiqTel\_degradation\_0, mRNA\_P\_Wnt8\_degradation-\_0, mRNA\_P\_cB\_degradation\_0, mRNA\_P\_z13\_degradation\_0), which do not influence its rate of change because this constant species is on the boundary of the reaction system:

$$\frac{d}{dt}\text{none} = 0 \quad (2290)$$

**SBML2 $\text{\LaTeX}$**  was developed by Andreas Dräger<sup>a</sup>, Hannes Planatscher<sup>a</sup>, Dieudonné M Wouamba<sup>a</sup>, Adrian Schröder<sup>a</sup>, Michael Hucka<sup>b</sup>, Lukas Endler<sup>c</sup>, Martin Golebiewski<sup>d</sup> and Andreas Zell<sup>a</sup>. Please see <http://www.ra.cs.uni-tuebingen.de/software/SBML2LaTeX> for more information.

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