







maintenance\_fun constant

keep\_ribosome\_kcat FALSE keep\_transport\_kcat FALSE

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	1	-0.04	-0.019	0	-1	-0.167	Ō	Ō	0
AA	0	0	0	0	1	-0.167	0	0	-0.2
NT	0	0	0	<b>–1</b>	0	0.334	<b>–1</b>	<b>–1</b>	0
ADP	0	-0.96	-0.981	1	0	0.666	0	0	0.8
ATP	0	0.96	0.981	0	0	-0.666	0	0	-0.8
RNA	0	0	0	0	0	0	1	0	0
DNA	0	0	0	0	0	0	0	1	0
р	0	0	0	0	0	0	0	0	0.2

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
x_C	0.1	0	0	0	0	0	Ō	Ō	0
x_W	0	20	40	0	0	0	0	0	0
С	0	6	12	0	6	6	0	0	0
AA	0	0	0	0	0	4	0	0	4
NT	0	0	0	4	0	0	4	4	0
ADP	0	1	2	0	0	0	0	0	0
ATP	0	0	0	0	0	2	0	0	2
RNA	0	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0	0

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	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
x_C	0	0	0	0	0	0	Ō	0	0
xW	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0
ADP	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	0	0	0
RNA	0	0	0	0	0	0	0	0	40
DNA	0	0	0	0	0	0	4	4	0
р	0	0	0	0	0	0	0	0	0

#### kcat

tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
 31	316 0	158	18	8	153	6	13	19

#### Keq



## phi input

				[,4]						
[1,]	0.065	0.035	0.035	0.003	0.248	0.032	0.119	0.003	0.46	

## average saturation input

# minimal phi constraint

[1,]

### minimal f constraint

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]	[,9]
[1,]	Ō	Ō	Ō	Ō	Ō	Ō	Ō	Ō	Ō