





maintenance\_fun constant

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

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	INH	r
С	1	-0.4	-0.3	0	0	0	0	Ö	0	0
I	0	0.2	0.2	0	-1	-0.17	0	0	0	0
AA	0	0	0	0	1	-0.17	0	0	-1	-0.2
NT	0	0	0	-1	0	0.34	-1	-1	0	0
ADP	0	-0.6	-0.7	1	0	0.66	0	0	0	0.8
ATP	0	0.6	0.7	0	0	-0.66	0	0	0	-0.8
rRNA	0	0	0	0	0	0	1	0	0	0
DNA	0	0	0	0	0	0	0	1	0	0
INH	0	0	0	0	0	0	0	0	1	0
р	0	0	0	0	0	0	0	0	0	0.2

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	INH	r
x_C	0.1	0	0	0	0	0	0	Ö	0	0
x_W	0	10	2	0	0	0	0	0	0	0
С	0	8	1.6	0	0	0	0	0	0	0
I	0	0	0	0	2	2	0	0	0	0
AA	0	0	0	0	0	2	0	0	2	2
NT	0	0	0	1	0	0	1	1	0	0
ADP	0	1	0.2	0	0	0	0	0	0	0
ATP	0	0	0	0	0	3	0	0	0	3
rRNA	0	0	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0	0	0
INH	0	0	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0	0	0

	tC	GLY	RESP	ADPS	EAA	ENT	RNAp	DNAp	INH	r
x_C	0	0	0	0	0	0	Ō	Ō	0	0
x_W	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0
I	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0
ADP	0	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	4	4	0	0
INH	0	0	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0	0	0

#### kcat

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	INH	r
kcatf	51	346.1	69.2	24.5	6.6	134.1	5.7	12.3	9.4	17.9
kcatb	0	0	0	0	0	0	0	0	0	0

# Keq



## phi input

[1,]	<b>[,1]</b> 0.065	<b>[,2]</b> 0.035	<b>[,3]</b> 0.035	<b>[,4]</b> 0.003	<b>[,5]</b> 0.248	<b>[,6]</b> 0.032	<b>[,7]</b> 0.119	<b>[,8]</b> 0.003	<b>[,9]</b> O	<b>[,10]</b> 0.46	

## average saturation input

# minimal phi constraint

[1,]

### minimal f constraint

[1,]

**[,10]** 0