





maintenance\_fun constant

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

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	1	-0.4	-0.3	0	0	0	Ō	Ō	0
I	0	0.2	0.2	0	-1	-0.17	0	0	0
AA	0	0	0	0	1	-0.17	0	0	-0.2
NT	0	0	0	-1	0	0.34	-1	-1	0
ADP	0	-0.6	-0.7	1	0	0.66	0	0	0.8
ATP	0	0.6	0.7	0	0	-0.66	0	0	-0.8
rRNA	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
0.1	0	0	0	0	0	0	0	0
0	10	2	0	0	0	0	0	0
0	8	1.6	0	0	0	0	0	0
0	0	0	0	2	2	0	0	0
0	0	0	0	0	2	0	0	2
0	0	0	1	0	0	1	1	0
0	1	0.2	0	0	0	0	0	0
0	0	0	0	0	3	0	0	3
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
			0.1 0 0   0 10 2   0 8 1.6   0 0 0   0 0 0   0 0 0   0 0 0   0 0 0	0.1 0 0 0   0 10 2 0   0 8 1.6 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 1	0.1 0 0 0 0   0 10 2 0 0   0 8 1.6 0 0   0 0 0 0 2   0 0 0 0 0   0 0 0 0 0   0 0 0 1 0	0.1 0 0 0 0 0   0 10 2 0 0 0   0 8 1.6 0 0 0   0 0 0 0 2 2   0 0 0 0 0 2   0 0 0 0 0 2   0 0 0 1 0 0	0.1 0 0 0 0 0   0 10 2 0 0 0 0   0 8 1.6 0 0 0 0   0 0 0 0 2 2 0   0 0 0 0 2 2 0   0 0 0 0 0 2 0   0 0 0 1 0 0 1	0.1 0 0 0 0 0 0   0 10 2 0 0 0 0 0   0 8 1.6 0 0 0 0 0   0 0 0 0 2 2 0 0   0 0 0 0 2 2 0 0   0 0 0 0 0 1 1   0 0 0 1 0 0 1 1

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	tC	GLY	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
x_C	0	0	0	0	0	0	Ō	Ō	0
x_W	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0
I	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
rRNA	0	0	0	0	0	0	0	0	20
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
kcatf	56.4	389.6	77.9	27.7	7.5	151.2	6.4	13.8	20.2
kcatb	0	0	0	0	0	0	0	0	0

#### 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