







maintenance_fun constant

keep_ribosome_kcat FALSE keep_transport_kcat FALSE

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	0.5	-0.2	-0.1	0	-0.5	-0.167	0	0	0
l	0	0.1	0.1	0	-0.5	0	0	0	0
AA	0	0	0	0	1	-0.167	0	0	-0.2
NT	0	0	0	-1	0	0.334	-1	– 1	0
ADP	0.5	-0.8	-0.9	1	0	0.666	0	0	0.8
ATP	-0.5	0.8	0.9	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
0.1	0	0	0	0	0	0	0	0
0	10	30	0	0	0	0	0	0
0	9	27	0	9	9	0	0	0
0	0	0	0	6	0	0	0	0
0	0	0	0	0	3	0	0	3
0	0	0	2	0	0	2	2	0
0	1	3	0	0	0	0	0	0
3	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 30	0.1 0 0 0 0 10 30 0	0.1 0 0 0 0 0 10 30 0 0	0.1 0 0 0 0 0 0 10 30 0 0	0.1 0 0 0 0 0 0 0 10 30 0 0 0	0.1 0 0 0 0 0 0 0 0 10 30 0 0 0 0

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	tC	GLY	RESP	ADPS	EAA	ENI	RNAp	DNAp	r
x_C	0	0	0	0	0	0	Ō	Ō	0
xW	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
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	
kcatf kcatb	64		422	26	10	149	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