





maintenance_fun constant

keep_ribosome_kcat FALSE keep_transport_kcat FALSE

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	1	-0.14	-0.07	0	-0.5	-0.167	0	0	0
I	0	0.11	0.05	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	-0.86	-0.93	1	0	0.666	0	0	8.0
ATP	0	0.86	0.93	0	0	-0.666	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	0	0	0	0	0	0	0	0
0	0.7	7	0	7	7	0	0	0
0	0	0	0	2	0	0	0	0
0	0	0	0	0	2	0	0	2
0	0	0	1	0	0	1	1	0
0	0.1	1	0	0	0	0	0	0
0	0	0	0	0	14	0	0	14
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 0 0 0 0 0 0 0 0 0 0.7 7 7 0 7 7 0 0 0 0 2 0 0 0 0 0 2 0 0 0 0 1 0 0 0 0.1 1 0 0 0	0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.7 7 0 7 7 0 0 0 0 0 2 0 0 0 0 0 0 2 0 0 0 0 0 2 0 0 0 0 1 0 0 1 0 0.1 1 0 0 0 0	0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.7 7 0 7 7 0 0 0 0 0 0 2 0 0 0 0 0 0 0 2 0 0 0 0 0 0 0 2 0 0 0 0 0 1 0 0 1 1 0 0.1 1 0 0 0 0 0

KA

	tC	GLY	RESP	ADPS	EAA	ENI	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	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	42	339	226	221	10	209	6	12	17
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