





maintenance_fun constant

keep_ribosome_kcat FALSE keep_transport_kcat FALSE

	tC	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	1	-0.45	-0.3	0	0	0	0	0	0
I	0	0.25	0.25	0	-1	-0.167	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	-0.55	-0.7	1	0	0.666	0	0	0.8
ATP	0	0.55	0.7	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	10	2	0	0	0	0	0	0
0	7	1.4	0	0	0	0	0	0
0	0	0	0	10	10	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 7 1.4 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 7 1.4 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 7 1.4 0 0 0 0 0 0 10 0 0 0 0 0 0 0 0 1 0	0.1 0 0 0 0 0 0 10 2 0 0 0 0 7 1.4 0 0 0 0 0 0 10 10 0 0 0 0 2 0 0 0 1 0 0 0 0 1 0 0	0.1 0 0 0 0 0 0 10 2 0 0 0 0 0 7 1.4 0 0 0 0 0 0 0 0 10 10 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 7 1.4 0 0 0 0 0 0 0 0 0 10 10 0 0 0 0 0 0 0 2 0 0 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	FΔΔ	FNT	RNAn	DNAp	r	
kcatf kcatb	46		155	31	8	174	7	16	23 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