





	tC	ATPS	ADPS	EAA	ENT	LIPS	Maint	RNAp	DNAp	r
С	1	-0.02	0	-1	-0.167	-0.18	0	Ō	0	0
AA	0	0	0	1	-0.167	0	0	0	0	-0.2
NT	0	0	-1	0	0.334	0	0	-1	-1	0
ADP	0	-0.98	1	0	0.666	0.82	1	0	0	0.8
ATP	0	0.98	0	0	-0.666	-0.82	-1	0	0	-0.8
LIP	0	0	0	0	0	0.18	0	0	0	0
RNA	0	0	0	0	0	0	0	1	0	0
DNA	0	0	0	0	0	0	0	0	1	0
р	0	0	0	0	0	0	0	0	0	0.2

K

	tC	ATPS	ADPS	EAA	ENT	LIPS	Maint	RNAp	DNAp	r
x_C	0.1	0	0	0	0	0	0	Ō	Ō	0
x_W	0	20	0	0	0	0	0	0	0	0
С	0	9	0	9	9	9	0	0	0	0
AA	0	0	0	0	3	0	0	0	0	3
NT	0	0	3	0	0	0	0	3	3	0
ADP	0	1	0	0	0	0	0	0	0	0
ATP	0	0	0	0	3	3	3	0	0	3
LIP	0	0	0	0	0	0	0	0	0	0
RNA	0	0	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0	0	0

	tC	ATPS	ADPS	EAA	ENT	LIPS	Maint	RNAp	DNAp	r
x_C	0	0	0	0	0	0	0.02	Ō	Ō	0
x_W	0	0	0	0	0	0	0	0	0	0
С	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
LIP	30	0	0	0	0	0	0	0	0	0
RNA	0	0	0	0	0	0	0	0	0	70
DNA	0	0	0	0	0	0	0	5	5	0
р	0	0	0	0	0	0	0	0	0	0

kcat

	tC	ATPS	ADPS	EAA	ENT	LIPS	Maint	RNAp	DNAp	r
kcatf	20	903	11	10	142	58	76	6	15	31
kcatb	0	0	0	0	0	0	0	0	0	0

Keq



phi input

[1,]	[,1] 0.11	[,2] 0.023	[,3] 0.005	[,4] 0.165	[,5] 0.023	[,6] 0.031	[,7] 0.2546	[,8] 0.0794	[,9] 0.002	[,10] 0.307	

average saturation input

minimal phi constraint

[1,]

minimal f constraint

[1,]

[,10] 0