









maintenance_fun constant

keep_ribosome_kcat FALSE keep_transport_kcat FALSE

	tC	FERM	RESP	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
С	1	-0.2	-0.15	0	0	0	0	0	Ō	0	0	0	0	0	0	0	0
ı	0	0.1	0.1	0	-1	-0.17	-0.18	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	1	-0.17	0	0	0	0	0	0	0	0	0	-0.006	0
NT	0	0	0	-1	0	0.34	0	0	-1	-1	-1	1	1	1	-1	0	0
ADP	0	-0.8	-0.85	1	0	0.66	0.82	1	0	0	0	0	0	0	0	0.026	0.026
ATP	0	0.8	0.85	0	0	-0.66	-0.82	-1	0	0	0	0	0	0	0	-0.026	-0.026
LIP	0	0	0	0	0	0	0.18	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	1	0	0	-1	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	0	1	0	0	-1	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	1	0	0	-1	0	-0.968	0.968
DNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.974	-0.974
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.006

	tC	FERM	RESP	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
x_C	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_W	0	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
С	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	31	31	31	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0
NT	0	0	0	2	0	0	0	0	2	2	2	0	0	0	2	0	0
ADP	0	1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	2	2
LIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
DNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	tC	FERM	RESP	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
x_C	0	0	0	0	0	0	0	0.01	Ö	Ö	Ö	0	0	0	Ö	0	0
x_W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ı	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ADP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
tRNA DNA TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0	4	4	4	0	0	0	4	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

kcat

	tC	FERM	RESP	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
kcatf	155	2947.3	589.5	35.5	18.7	280.1	108.3	76.6	16.8	1.9	16.8	186.7	186.7	186.7	28	32081.1	1947.6
kcatb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Keq

[1,]	[,1] Inf	[,2] Inf	[,3] Inf	[,4] Inf	[, 5] Inf	[, 6] Inf	[, 7] Inf	[,8] Inf	[, 9] Inf	[, 10] Inf	[,11] Inf	[,12] Inf	[,13] Inf	[,14] Inf	[,15] Inf	[,16] Inf	[,17] Inf	

phi input

[,8] 0.3036 **[,9]** 0.0426 **[,10]** 0.0213 **[,11]** 0.0071 **[,12]** 0.002 **[,13]** 0.006 **[,17]** 0.284

[,5] 0.165

[,3] 0.023

[,1] 0.043

[1,]

[,6] 0.021 **[,7]** 0.031

average saturation input

minimal phi constraint

,		u	an	•	L	

[1,]

minimal f constraint

)[15	u	aı	τ	

[,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10] [,11] [,12] [,13] [,14] [,15] [,16] [,17] 0 0 0 0 0 0 0 0 0 0 0 0

[1,]