

maintenance\_fun constant

keep\_ribosome\_kcat FALSE keep\_transport\_kcat FALSE

	tC	tl	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	1	0	-0.45	-0.3	0	0	0	0	Ö	0
I	0	-1	0.25	0.25	0	-1	-0.167	0	0	0
AA	0	0	0	0	0	1	-0.167	0	0	-0.2
NT	0	0	0	0	-1	0	0.334	<b>–1</b>	-1	0
ADP	0	0	-0.55	-0.7	1	0	0.666	0	0	0.8
ATP	0	0	0.55	0.7	0	0	-0.666	0	0	-0.8
rRNA	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

	tC	tl	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
x_C	0.1	0	0	0	0	0	0	0	0	0
$x_W$	0	1	10	2	0	0	0	0	0	0
С	0	0	2	0.4	0	0	0	0	0	0
I	0	8	0	0	0	8	8	0	0	0
AA	0	0	0	0	0	0	2	0	0	2
NT	0	0	0	0	1	0	0	1	1	0
ADP	0	0	1	0.2	0	0	0	0	0	0
ATP	0	0	0	0	0	0	3	0	0	3
rRNA	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	tl	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
x_C	0	0	0	0	0	0	0	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
I	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
rRNA	0	0	0	0	0	0	0	0	0	20
DNA	0	0	0	0	0	0	0	4	4	0
р	0	0	0	0	0	0	0	0	0	0

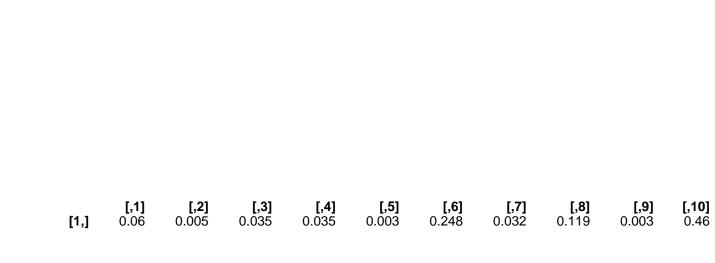
#### kcat

	tC	tl	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
kcatf	47	20	310	155	31	8	173	7	16	23
kcatb	0	0	0	0	0	0	0	0	0	0

# Keq



# phi input



### average saturation input

## minimal phi constraint

[1,]

#### minimal f constraint

[1,]

**[,10]** 0