

maintenance\_fun constant

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

	tC	GLY	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
С	1	-0.2	0	0	0	0	-0.167	Ō	0	0
I	0	0.2	-1	-0.019	0	-1	0	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	-1	-1	0
ADP	0	-0.8	0	-0.981	1	0	0.666	0	0	0.8
ATP	0	8.0	0	0.981	0	0	-0.666	0	0	-0.8
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

	tC	GLY	FERM	RESP	ADPS	EAA	ENT	RNAp	DNAp	r
x_C	0.1	0	0	0	0	0	0	0	0	0
$x_W$	0	0	10	20	0	0	0	0	0	0
С	0	13	0	0	0	0	13	0	0	0
I	0	0	1	2	0	1	0	0	0	0
AA	0	0	0	0	0	0	1	0	0	1
NT	0	0	0	0	1	0	0	1	1	0
ADP	0	1	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	1	0	0	1
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	GLY	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
RNA	0	0	0	0	0	0	0	0	0	40
DNA	0	0	0	0	0	0	0	4	4	0
р	0	0	0	0	0	0	0	0	0	0

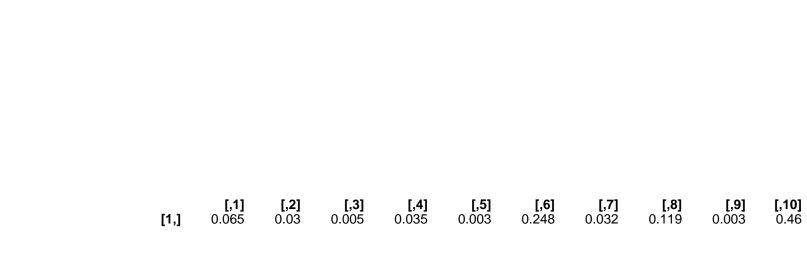
#### kcat

	tC	GLY	FERM	RESP	ADPS	FΔΔ	FNT	RNAp	DNAp	r	
kcatf kcatb	29	386	10 0	5	9	7	133	6	13	19	

# Keq



# phi input



### average saturation input

## minimal phi constraint

[1,]

#### minimal f constraint

[1,]

**[,10]** 0