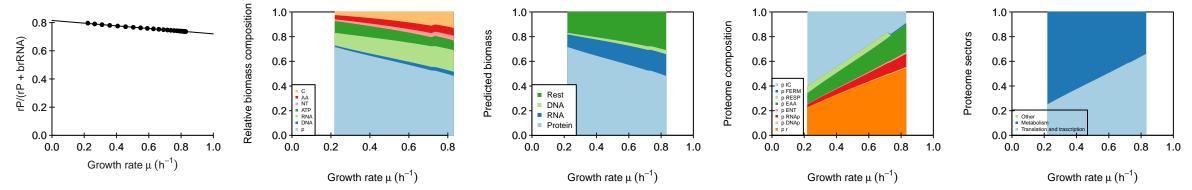


Protein mass fraction in ribosome



maintenance_fun constant

keep_ribosome_kcat FALSE keep_transport_kcat FALSE

	tC	FERM	RESP	EAA	ENT	RNAp	DNAp	r
С	1	-1	-1	-1	-0.45	0	0	0
AA	0	0	0	1	-0.45	0	0	-0.9
NT	0	0	0	0	1	-1	-1	0
ATP	-0.1	0.5	1	0	-0.1	0	0	-0.1
RNA	0	0	0	0	0	1	0	0
DNA	0	0	0	0	0	0	1	0
р	0	0	0	0	0	0	0	1

K

	tC	FERM	RESP	EAA	ENT	RNAp	DNAp	r
x_C	0.1	0	0	0	0	0	Ō	0
x_W	0	10	20	0	0	0	0	0
С	17	6	12	6	6	0	0	0
AA	0	0	0	11	4	0	0	4
NT	0	0	0	0	11	4	4	0
ATP	2	6	12	0	2	0	0	2
RNA	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0
р	0	0	0	0	0	0	0	0

KA

	tC	FERM	RESP	EAA	ENT	RNAp	DNAp	r
x_C	0	0	0	0	0	0	0	0
x_W	0	0	0	0	0	0	0	0
С	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	0	0
RNA	0	0	0	0	0	0	0	40
DNA	0	0	0	0	0	4	4	0
р	0	0	0	0	0	0	0	0

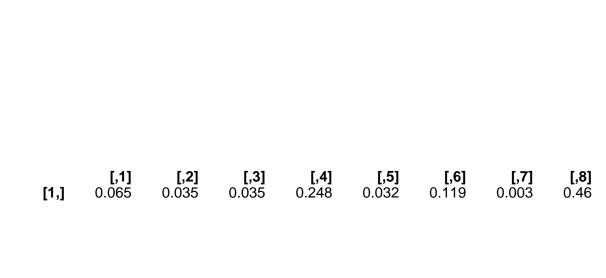
kcat

	tC	FERM	RESP	EAA	ENT	RNAp	DNAp	r
kcatf	32	160	16	7	48	6	13	4
kcatb	3	16	2	1	5	0	0	0

Keq



phi input



average saturation input

minimal phi constraint

minimal f constraint