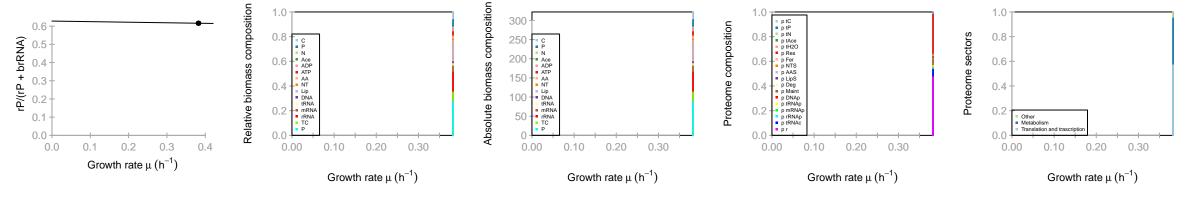
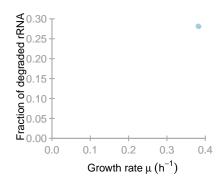


Protein mass fraction in ribosome





	tC	tP	tN	tAce	tH2O	Res	Fer	NTS	AAS	LipS	Deg	Maint	DNAp	tRNAp	mRNAp	rRNAp	tRNAc	r
С	1	0	0	0	0	-0.002	-0.02	-0.17	-0.76	-0.8	ō	0	Ō	Ö	Ö	Ō	0	0
Р	0	1	0	0	0	-0.124	-0.12	0.05	0	-0.1	0	0	0	0	0	0	0	0
N	0	0	1	0	0	0	0	-0.08	-0.24	-0.1	0	0	0	0	0	0	0	0
Ace	0	0	0	-1	0	0.002	0.02	0	0	0	0	0	0	0	0	0	0	0
H2O	0	0	0	0	1	0.072	0.07	-0.06	0	0	0	0	0	0	0	0	0	0
ADP	0	0	0	0	0	-0.874	0.91	0.67	0	0	0	1	0	0	0	0	0.1	0.1
ATP	0	0	0	0	0	0.926	-0.86	-0.69	0	0	0	-1	0	0	0	0	-0.1	-0.1
AA	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-0.2	0
NT	0	0	0	0	0	0	0	0.28	0	0	1	0	-1	-1	-1	-1	0	0
Lip	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
DNÀ	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	-0.1	0	0	1	0	0	-0.7	0.1
mRNA	0	0	0	0	0	0	0	0	0	0	-0.1	0	0	0	1	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	-0.8	0	0	0	0	1	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	-0.9
P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8

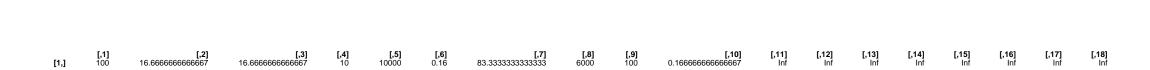
	tC	tP	tN	tAce	tH2O	Res	Fer	NTS	AAS	LipS	Deg	Maint	DNAp	tRNAp	mRNAp	rRNAp	tRNAc	r
x_C	0.1	0	0	0	0	0	0	0	0	0	ō	0	Ö	Ö	Ö	Ö	0	0
x_C x_P	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_N	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_Ace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_H2O	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
С	0	0	0	0	0	5	5	5	4	5	0	0	0	0	0	0	0	0
Р	0	0	0	0	0	5	3	10	0	4	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0
Ace	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ace H2O	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0
ADP	0	0	0	0	0	5	5	10	0	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	4	5
AA	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10	0
NT	0	0	0	0	0	0	0	10	0	0	0	0	5	3	1	2	0	0
Lip DNA	0	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	0	0	0	0	0	0	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0
mRNA	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	tC	tP	tN	tAce	tH2O	Res	Fer	NTS	AAS	LipS	Deg	Maint	DNAp	RNAp	mRNAp	rRNAp	tRNAc	r
x_C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_Ace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_H2O	0	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	0
Р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ace H2O ADP	0	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	0
ATP	0	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	0
NT	0	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	0
DNA	0	0	0	0	0	0	0	0	0	0	0	0	10	10	10	10	0	0
tRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
rRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
TC	0	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	0

kcat

kcatf kcatb	[,1] 500 50	[,2] 100 6	[,3] 100 6	[,4] 60 6	[,5] 1000 1	[,6] 20 1	[,7] 250 1	[,8] 300 1	[,9] 80 1	[, 10] 40 4	[,11] 50 0	[,12] 10 0	[,13] 200 0	[,14] 136 0	[,15] 96 0	[,16] 136 0	[,17] 50 0	[,18] 4.55 0

Keq



minimal	phi	constraint	
---------	-----	------------	--

[,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10] [,11] [,12] [,13] [,14] [,15] [,16] [,17] [,18] 0 0 0 0 0.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0

[1,]

"	13	LI	an	ıι	