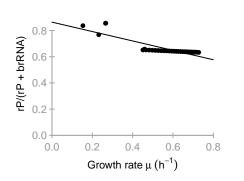
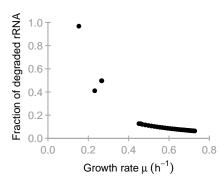
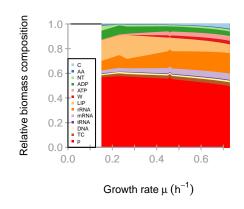
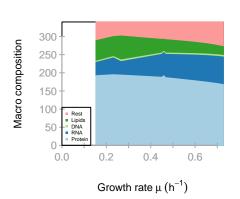


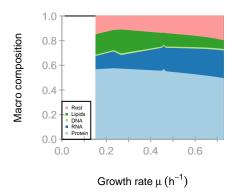
Protein mass fraction in ribosome

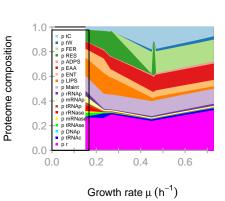


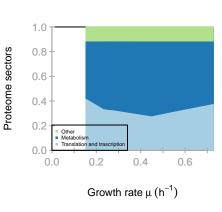




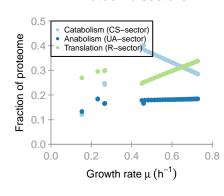








Proteome sectors



	tC	tW	FER	RES	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
С	1	0	-0.2	-0.02	0	-1	-0.167	-0.18	0	0	Ō	0	0	0	0	0	0	0
AA	0	0	0	0	0	1	-0.167	0	0	0	0	0	0	0	0	0	-0.01	0
NT	0	0	0	0	-1	0	0.334	0	0	-1	-1	-1	1	1	1	-1	0	0
ADP	0	0	-0.8	-0.98	1	0	0.666	0.82	1	0	0	0	0	0	0	0	0.05	0.05
ATP	0	0	0.8	0.98	0	0	-0.666	-0.82	-1	0	0	0	0	0	0	0	-0.05	-0.05
W	0	-1	0.2	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	0	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	0	1	0	0	-1	0	0	0	0	0
mRNA	0	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	0	1	0	0	-1	0	-0.94	0.94
DNA	0	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	0.95	-0.95
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01

	tC	tW	FER	RES	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
x_C	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
x_W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
С	5	0	2	2	0	2	2	2	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0
NT	0	0	0	0	2	0	5	0	0	2	2	2	0	0	0	2	0	0
ADP	0	0	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0
ATP	0	0	4	4	0	0	2	2	2	0	0	0	0	0	0	0	2	2
W	0	10	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	0	0	0	0	0	0	0	64	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
tRNA	0	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	0
TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
р	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	tC	tW	FER	RES	ADPS	EAA	ENT	LIPS	Maint	rRNAp	mRNAp	tRNAp	rRNase	mRNase	tRNAse	DNAp	tRNAc	r
x_C	0	0	0	0	0	0	0	0	0	Ö	Ō	Ō	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	0
С	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
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
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	35	35	0	3	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	0	45
mRNA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
tRNA	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	2	2	2	0	0	0	2	0	0
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

catf	[,1] 500 50	[,2] 500 50	[,3] 100 10	[,4] 50 5	[,5] 10 1	[,6] 10 1	[,7] 60 6	[,8] 40 40	[,9] 10 0	[,10] 30 0	[,11] 20 0	[,12] 30 0	[,13] 20 0	[,14] 40 0	[,15] 20 0	[,16] 200 0	[,17] 12000 0	[,18] 600 0

Keq

[1,]	[,1] 100	[,2] 1	[,3] 300	[,4] 300	[,5] 5	[,6] 10	[,7] 50	[,8] 16	[,9] Inf	[, 10] Inf	[,11] Inf	[, 12] Inf	[,13] Inf	[,14] Inf	[, 15] Inf	[, 16] Inf	[, 17] Inf	[,18] Inf

minimal phi constraint

[,9] [,10] [,11] [,12] 0.122 0 0 0

[,15] [,16] [,17] 0.001 0 0

[,18] 0

 	P	 •	 •••

[8,] 0

[,1] [,2] [,3] [,4] [,5] [,6] [,7] 0 0 0 0 0 0

[1,]

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