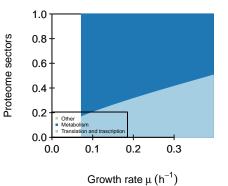
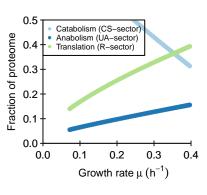


#### **Proteome sectors**





	tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
С	1	-0.2	-0.1	0	0	-0.167	0	0	0	0	0	0	0
I	0	0.1	0.1	0	-1	0	-0.18	0	0	0	0	0	0
AA	0	0	0	0	1	-0.167	0	0	0	0	0	-0.01	0
NT	0	0	0	-1	0	0.334	0	-1	-1	-1	-1	0	0
ADP	0	-0.8	-0.9	1	0	0.666	0.82	0	0	0	0	0.05	0.05
ATP	0	0.8	0.9	0	0	-0.666	-0.82	0	0	0	0	-0.05	-0.05
LIP	0	0	0	0	0	0	0.18	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	1	0	0	0	0	0
mRNA	0	0	0	0	0	0	0	0	1	0	0	0	0
tRNA	0	0	0	0	0	0	0	0	0	1	0	-0.94	0.94
DNA	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	0.95	-0.95
р	0	0	0	0	0	0	0	0	0	0	0	0	0.01

	tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
x_C	0.05	0	0	0	0	0	0	O	0	Ö	O	0	0
x_W	0	5	4.5	0	0	0	0	0	0	0	0	0	0
С	25	9	8.1	0	0	9	0	0	0	0	0	0	0
I	0	9	8.1	0	3	0	3	0	0	0	0	0	0
AA	0	0	0	0	9	3	0	0	0	0	0	3	0
NT	0	0	0	1	0	2	0	1	1	1	1	0	0
ADP	0	2	1.8	5	0	5	5	0	0	0	0	0	0
ATP	0	3	2.7	0	0	1	1	0	0	0	0	1	1
LIP	0	0	0	0	0	0	25	0	0	0	0	0	0
rRNA	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
tRNA	0	0	0	0	0	0	0	0	0	0	0	1	0
DNA	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	2
р	0	0	0	0	0	0	0	0	0	0	0	0	0

	tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
x_C	0	0	0	0	0	0	0	Ō	Ō	Ō	Ō	0	0
x_W	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
1	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
NT	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
ATP	0	0	0	0	0	0	0	0	0	0	0	0	0
LIP	60	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	50
mRNA	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
DNA	0	0	0	0	0	0	0	8	8	8	8	0	0
TC	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

### kcat

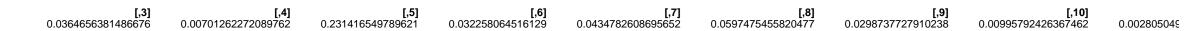
tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
54	100	10	8	7	78	33	5	1	5	8	7350	446
5	10	1	1	1	8	3	0	0	0	0	0	0

kcatf kcatb

## Keq

[1,]	<b>[,1]</b>	<b>[,2]</b>	<b>[,3]</b>	<b>[,4]</b>	<b>[,5]</b>	<b>[,6]</b>	<b>[,7]</b>	<b>[,8]</b>	<b>[,9]</b>	[, <b>10]</b>	[,11]	<b>[,12]</b>	<b>[,13]</b>
	5400	75	15	40	21	3.61111111111111	458.333333333333	Inf	Inf	Inf	Inf	Inf	Inf

# phi input



# average saturation input

### minimal phi constraint

	[.1]	ſ. <b>2</b> 1	ſ. <b>3</b> 1	[.4]	ſ. <b>5</b> 1	ſ. <b>6</b> 1	[.7]	<b>[.81</b>	ſ. <b>9</b> 1	[,10]	[.11]	[.12]	ſ.13 <b>1</b>
[1,]	Ö	Ö	Ö	Ō	Ö	Ö	Ö	Ö	Ō	Ö	Ö	Ö	Ö

#### minimal f constraint

[,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10] [,11] [,12 0 0 0 0 0 0 0 0 0 0 0										
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**[,13]** 0