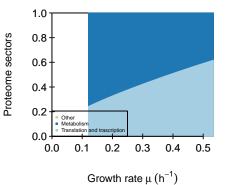
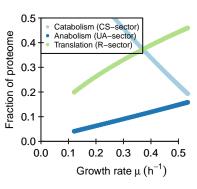


#### **Proteome sectors**





	tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
С	1	-0.2	0	0	-1	-0.167	-0.18	Ō	Ō	0	Ō	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	-1	1	0	0.666	0.82	0	0	0	0	0.05	0.05
ATP	0	0.8	1	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

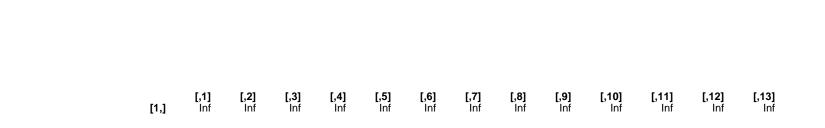
	tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
x_C	0.05	0	0	0	0	0	0	Ō	Ō	Ō	Ō	0	0
x_W	0	5	4.5	0	0	0	0	0	0	0	0	0	0
С	0	5	4.5	0	5	5	5	0	0	0	0	0	0
AA	0	0	0	0	0	4	0	0	0	0	0	4	0
NT	0	0	0	4	0	0	0	4	4	4	4	0	0
ADP	0	1	0.9	0	0	0	0	0	0	0	0	0	0
ATP	0	0	0	0	0	2	2	0	0	0	0	2	2
LIP	0	0	0	0	0	0	0	0	0	0	0	0	0
rRNA	0	0	0	0	0	0	0	0	0	0	0	0	0
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
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

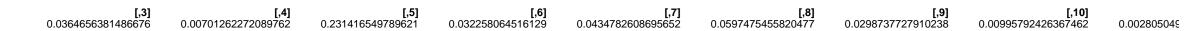
### kcat

	tC	FERM	ATPS	ADPS	EAA	ENT	LIPS	rRNAp	mRNAp	tRNAp	DNAp	tRNAc	r
kcatf	31	4330	433	9	8	109	41	7	1	7	10	7351	446
kcatb	0	0	0	0	0	0	0	0	0	0	0	0	0

## Keq



# 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