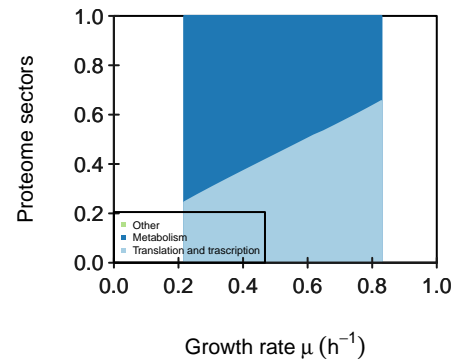
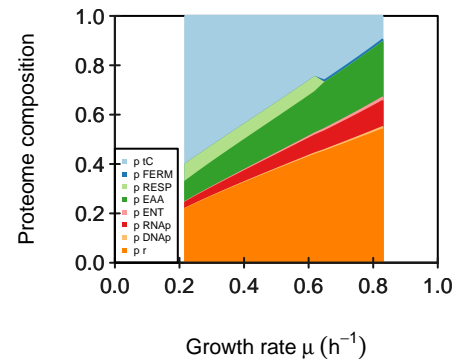
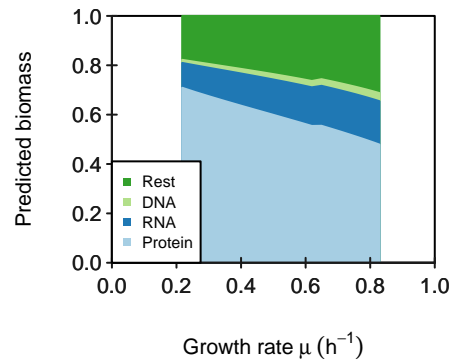
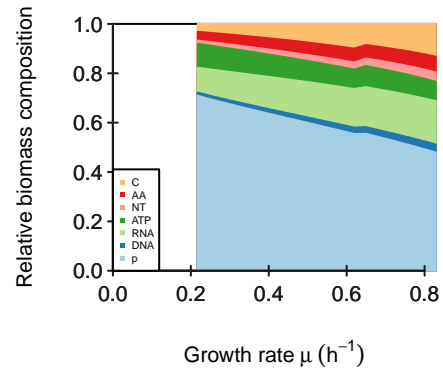
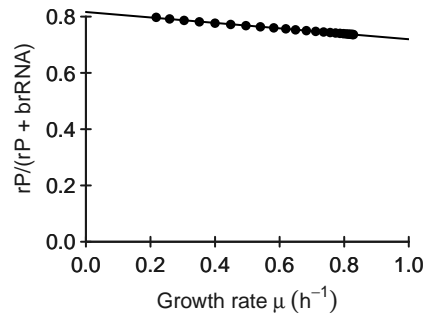


## Protein mass fraction in ribosome



keep\_ribosome\_kcat FALSE  
keep\_transport\_kcat FALSE  
maintenance\_fun constant

M

	tC	FERM	RESP	EAA	ENT	RNAp	DNAp	r
C	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
p	0	0	0	0	0	0	0	1

**K**

	<b>tC</b>	<b>FERM</b>	<b>RESP</b>	<b>EAA</b>	<b>ENT</b>	<b>RNAp</b>	<b>DNAp</b>	<b>r</b>
<b>x_C</b>	0.1	0	0	0	0	0	0	0
<b>x_W</b>	0	10	50	0	0	0	0	0
<b>C</b>	17	6	30	6	6	0	0	0
<b>AA</b>	0	0	0	11	4	0	0	4
<b>NT</b>	0	0	0	0	11	4	4	0
<b>ATP</b>	2	6	30	0	2	0	0	2
<b>RNA</b>	0	0	0	0	0	0	0	0
<b>DNA</b>	0	0	0	0	0	0	0	0
<b>p</b>	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
C	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
p	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

[1,]	906.6666666666667	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]
		100	8	12.833333333333333	2.2	Inf	Inf	Inf	

**phi input**

<b>[1,]</b>	<b>[,1]</b>	<b>[,2]</b>	<b>[,3]</b>	<b>[,4]</b>	<b>[,5]</b>	<b>[,6]</b>	<b>[,7]</b>	<b>[,8]</b>
	0.065	0.035	0.035	0.248	0.032	0.119	0.003	0.46

**average saturation input**

3

### minimal phi constraint

[1,]	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]
	0	0	0	0	0	0	0	0

### minimal f constraint

[1,]	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]
	0	0	0	0	0	0	0	0