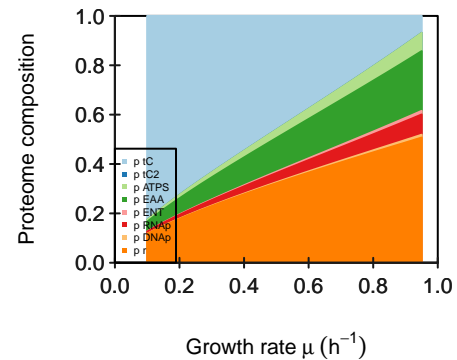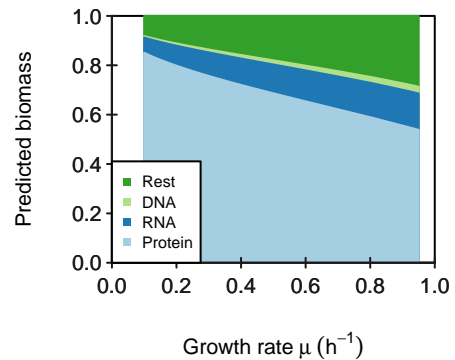**Protein mass fraction in ribosome**
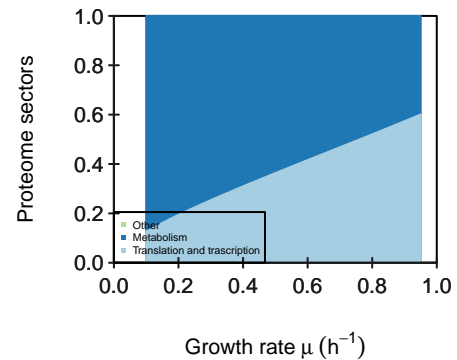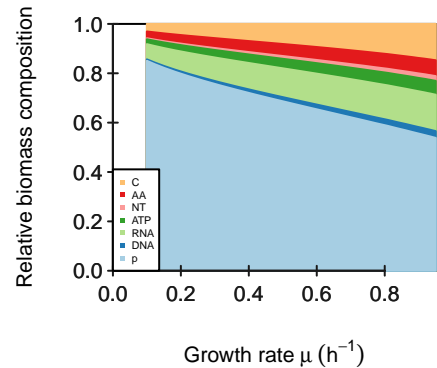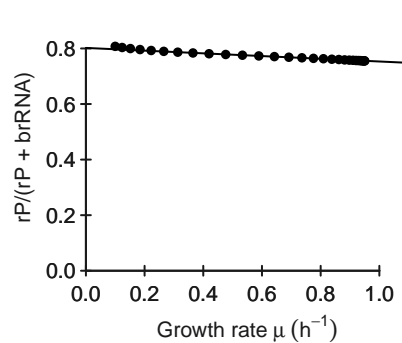
```
keep_ribosome_kcat FALSE
keep_transport_kcat FALSE
maintenance_fun constant
```

M

	tC	tC2	ATPS	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	0	0.5	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

	tC	tC2	ATPS	EAA	ENT	RNAp	DNAp	r
x_C	0.1	0	0	0	0	0	0	0
x_C2	0	0.1	0	0	0	0	0	0
C	0	0	11	11	11	0	0	0
AA	0	0	0	0	2	0	0	2
NT	0	0	0	0	0	1	1	0
ATP	0	0	0	0	2	0	0	2
RNA	0	0	0	0	0	0	0	0
DNA	0	0	0	0	0	0	0	0
p	0	0	0	0	0	0	0	0

KA

	tC	tC2	ATPS	EAA	ENT	RNAp	DNAp	r
x_C	0	0	0	0	0	0	0	0
x_C2	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	25
DNA	0	0	0	0	0	4	4	0
p	0	0	0	0	0	0	0	0

kcat

	tC	tC2	ATPS	EAA	ENT	RNAp	DNAp	r
kcatf	32	10	8	6	39	6	8	4
kcatb	0	0	0	0	0	0	0	0

Keq

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

phi input

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]
[1,]	0.065	0.001	0.068	0.248	0.035	0.119	0.003	0.461

average saturation input

3

minimal phi constraint

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

minimal f constraint

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