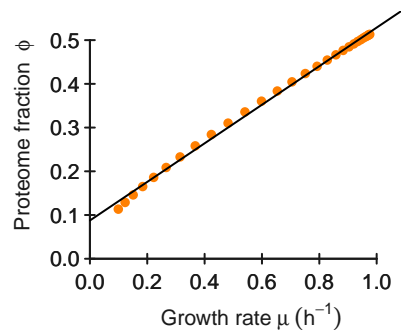
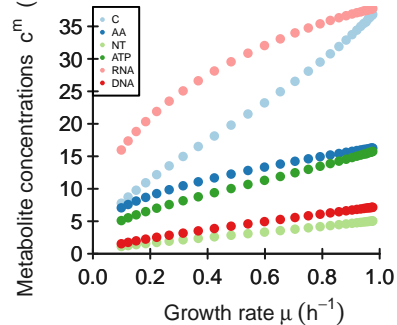
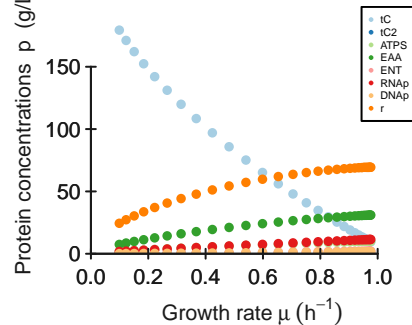
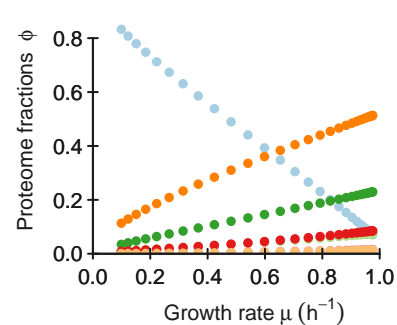
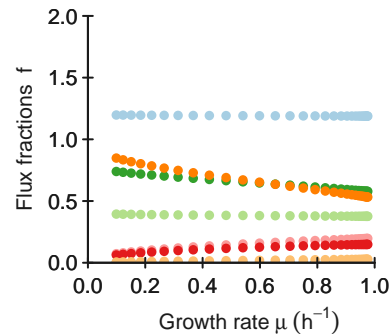
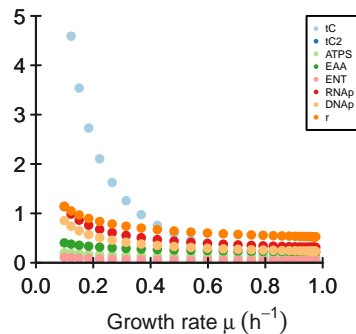
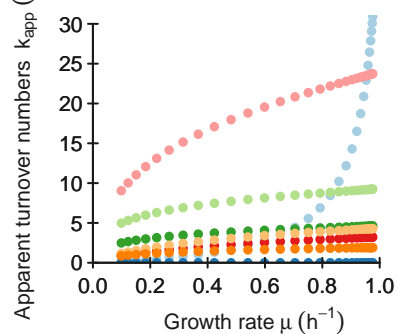
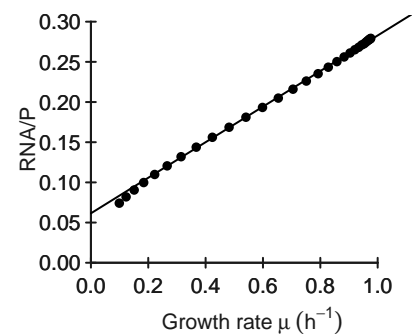
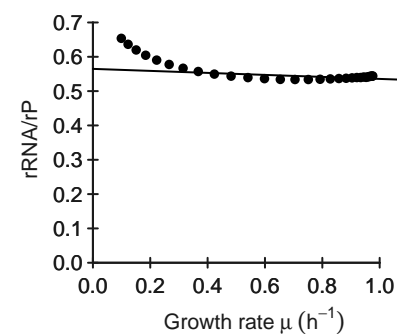
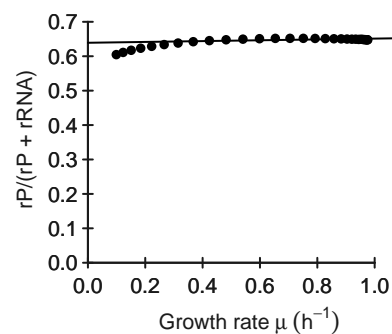
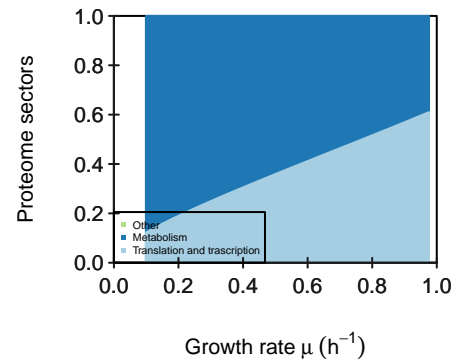
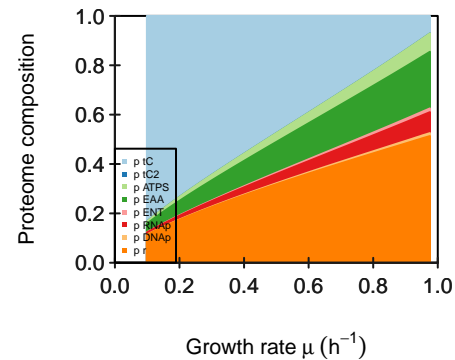
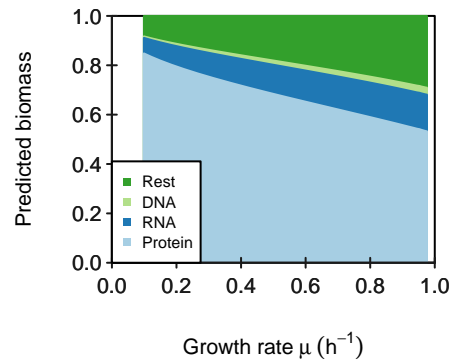
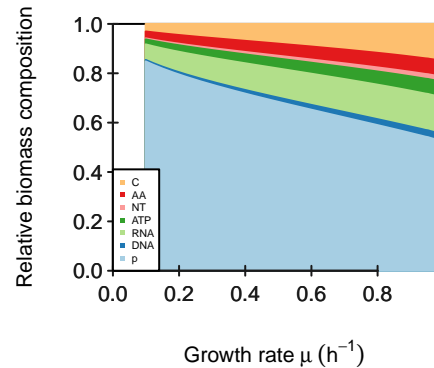
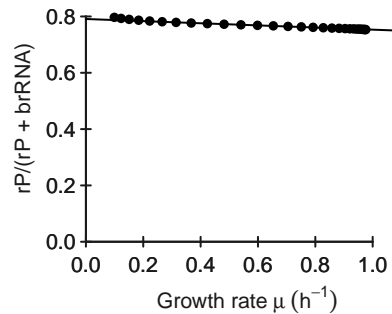


rMetabolite concentrations c^m (g/L)Protein concentrations p (g/L)Proteome fractions ϕ Flux fractions f Turnover times τ (h)Apparent turnover numbers k_{app} (h^{-1})**RNA/P****rRNA/rP****rP/(rP + rRNA)**

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	-0.8
NT	0	0	0	0	1	-1	-1	0
ATP	0	0	0.5	0	-0.1	0	0	-0.2
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	34	10	12	6	39	6	8	4
kcatb	0	0	0	0	0	0	0	0

Keq

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

phi input

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

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