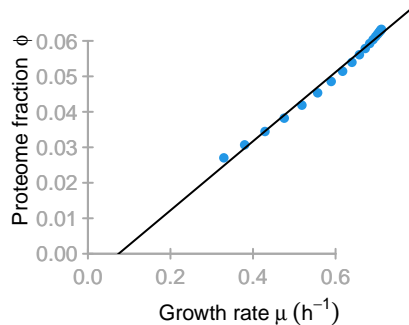
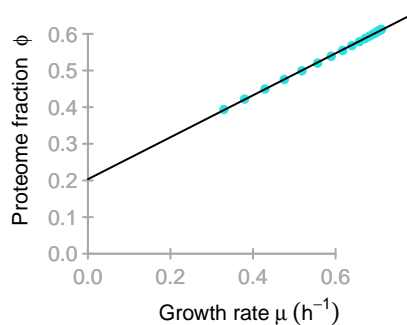
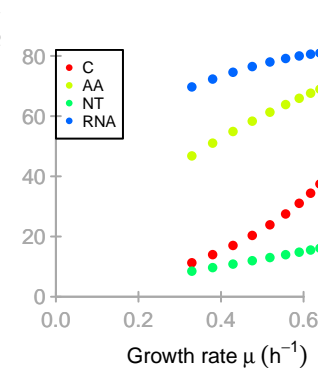
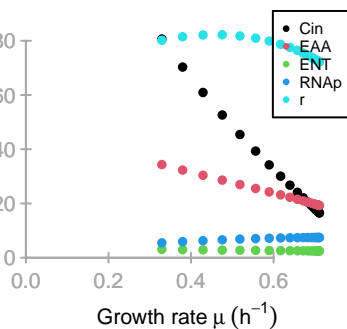
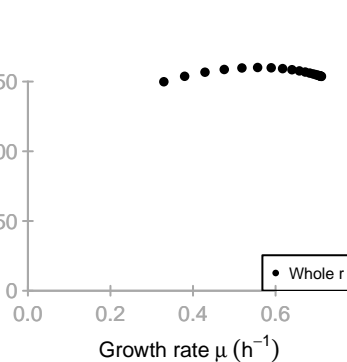
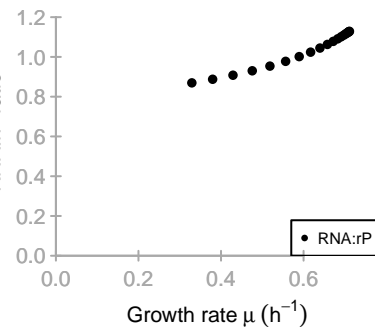
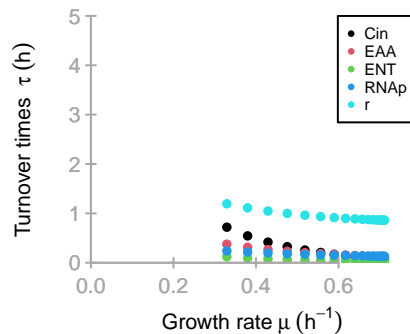
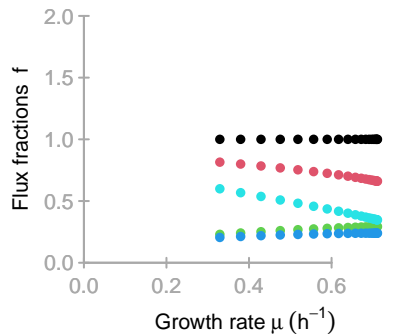
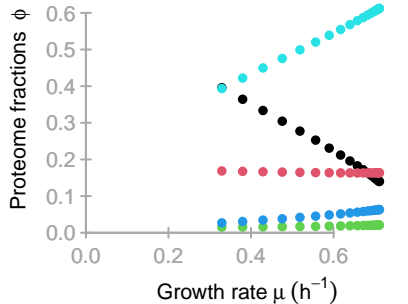
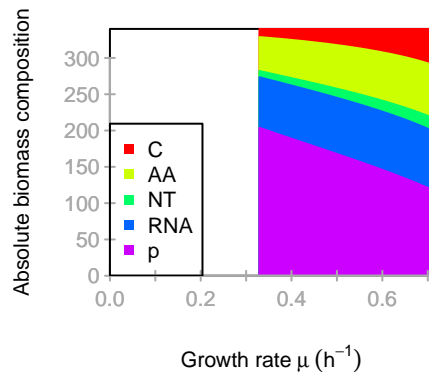
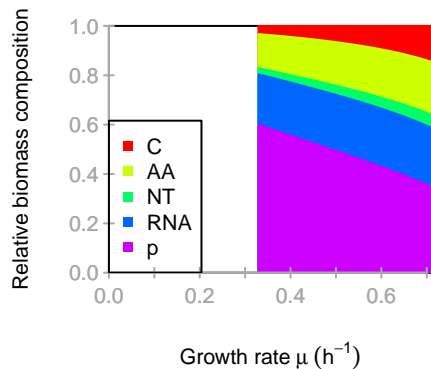
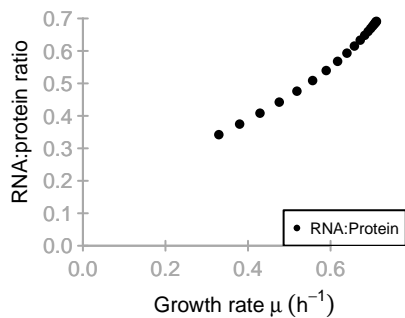


**RNAp****r**Metabolite concentrations  $c^m$  (g/L)Protein concentrations  $p$  (g/L)Ribosome concentrations  $p$  (g/L)

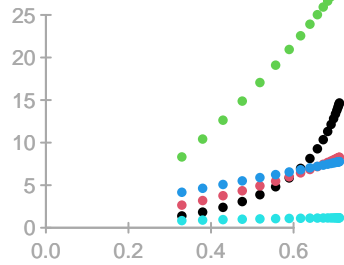
RNA:rP ratio





Apparent turnover numbers  $k_{app}$  ( $h^{-1}$ )

Growth rate  $\mu$  ( $h^{-1}$ )



**M**

	Cin	EAA	ENT	RNAp	r
C	1	-1	-0.66	0	0
AA	0	1	-0.34	0	-1
NT	0	0	1	-1	0
RNA	0	0	0	1	0
p	0	0	0	0	1

**K**

	<b>Cin</b>	<b>EAA</b>	<b>ENT</b>	<b>RNAp</b>	<b>r</b>
<b>x_C</b>	0.01	0	0	0	0
<b>C</b>	43	43	43	0	0
<b>AA</b>	0	68	68	0	68
<b>NT</b>	0	0	71	71	0
<b>RNA</b>	0	0	0	81	0
<b>p</b>	0	0	0	0	0

KA

	Cin	EAA	ENT	RNAp	r
x_C	0	0	0	0	0
C	0	0	0	0	0
AA	0	0	0	0	0
NT	0	0	0	0	0
RNA	0	0	0	0	100
p	0	0	0	0	0

## kcat

	<b>Cin</b>	<b>EAA</b>	<b>ENT</b>	<b>RNAp</b>	<b>r</b>
<b>kcatf</b>	15	25	111	69	5
<b>kcatb</b>	2	2	11	0	0



## Keq

[1,]	[,1]	[,2]	[,3]	[,4]	[,5]
32250	19.7674418604651	0.2450254943415	Inf	Inf	