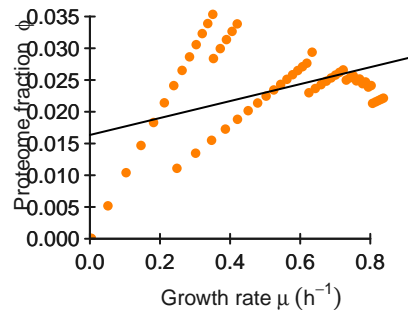
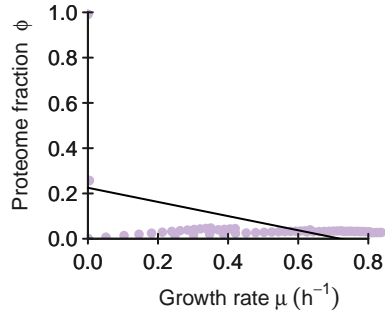


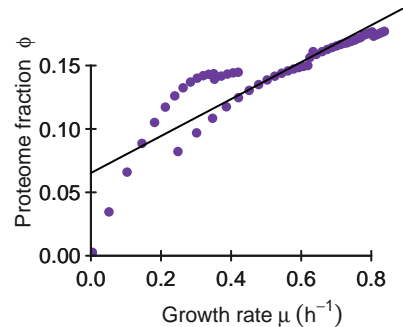
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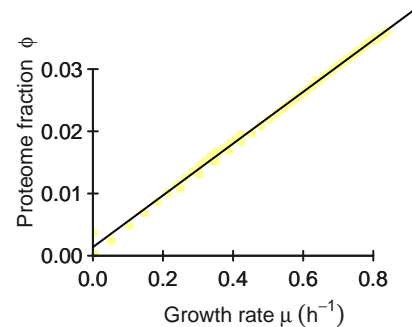
LIPS



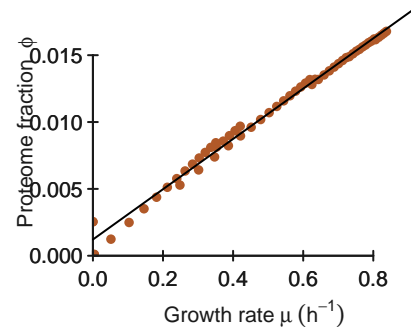
Maint



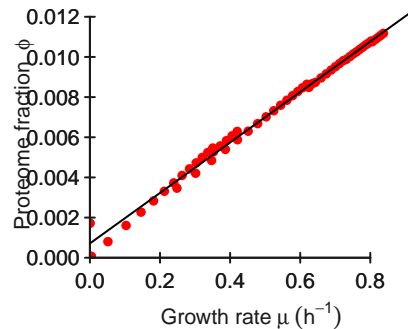
rRNAp



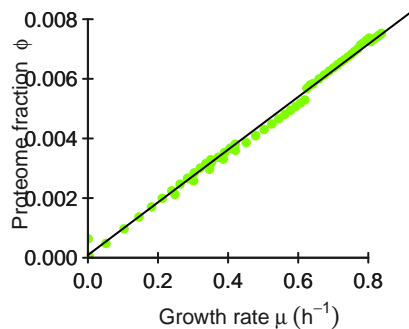
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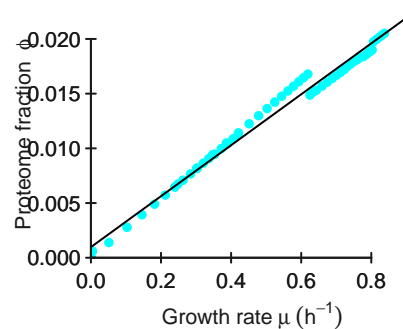
tRNAp



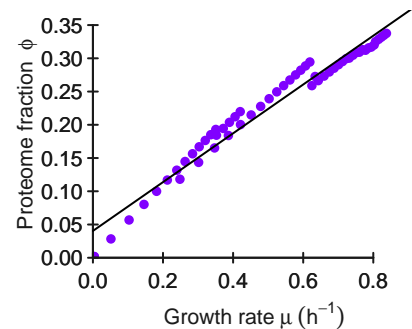
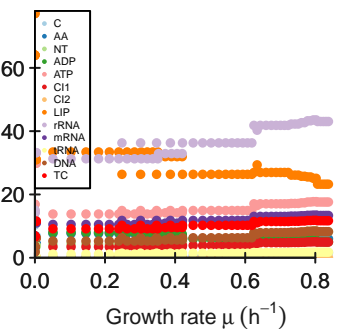
DNAp



tRNAc



r

Metabolite concentrations  $c^m$  (g/L)





**M**

[illegible]

**K**

[illegible]

**KA**[illegible]

# kcat

	[,1]	[,2]	[,3]	[,4]	[,5]	[,6]	[,7]	[,8]	[,9]	[,10]	[,11]	[,12]	[,13]	[,14]	[,15]	[,16]
kcatf	700	700	500	2000	70	14	12	220	73	81	15	10	15	16	15000	900
kcatb	70	70	50	200	7	1	1	22	7	0	0	0	0	0	0	0



# Keq

[1,]	[,1] 100	[,2] 15	[,3] 15	[,4] 125	[,5] 125	[,6] 14	[,7] 960	[,8] 11.111111111111111	[,9] 17.3809523809524	[,10] Inf	[,11] Inf	[,12] Inf	[,13] Inf	[,14] Inf	[,15] Inf	[,16] Inf
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### minimal phi constraint

[1,]	[.1] 0	[.2] 0	[.3] 0	[.4] 0	[.5] 0	[.6] 0	[.7] 0	[.8] 0	[.9] 0	[.10] 0	[.11] 0	[.12] 0	[.13] 0	[.14] 0	[.15] 0	[.16] 0
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## minimal f constraint

[1,]	[,1] 0	[,2] 0	[,3] 0	[,4] 0	[,5] 0	[,6] 0	[,7] 0	[,8] 0	[,9] 0	[,10] 8	[,11] 0	[,12] 0	[,13] 0	[,14] 0	[,15] 0	[,16] 0
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