

Comparison with experimentally determined competitive growth differences of insertional mutants

Result of the analysis for the FBA and MOMA predictions of essential, reduced growth and non-essential genes, as compared with the results of a knockout competition experiment from Badarinarayana, V., P. W. Estep, 3rd, et al. (2001). "Selection analyses of insertional mutants using subgenic-resolution arrays." Nat Biotechnol 19(11): 1060-5. The χ^2 test p-value for each set of predictions is calculated. For further explanation see corresponding chapter in the manuscript.

		Prediction	Neg. Sel.	Non Neg. Sel.	
FBA	Essential	142	80	62	$p=4 \times 10^{-4}$
	Reduced growth	46	24	22	
	Non essential	299	119	180	
MOMA	Essential	162	96	66	$p=10^{-5}$
	Reduced growth	44	19	25	
	Non essential	281	108	173	