

Table S1. Correlations between various gene properties and three properties known to bias phylostratigraphy, using gene ages 0-10.

	Evolutionary rate	ORF length	Expression level
Transcription factor binding sites	-0.09*	0.03**	0.09**
Codon adaptation index	-0.33**	0.04**	0.03**
Optimal AUG context	-0.14**	0.04**	0.06**
Purifying selection	-0.22**	0.47**	0.17**
Mean hydropathicity	0.03*	-0.14**	-0.10**
Percent in disordered regions	0.05*	0.13**	0.01
Percent in transmembrane regions	0.07*	-0.07*	-0.07*
Genetic coregulation	-0.10**	0.03*	0.07*
Number of transcription factors	-0.07*	0.02*	0.02*
Feed-forward loops	-0.07*	0.02	0.03*
Percent alpha helices	-0.05*	-0.07*	0.09**
Percent beta sheets	-0.01	-0.22**	0.02*
Aggregation propensity	0.05*	-0.06*	-0.11**
Protein-protein interactions	-0.23**	0.11**	0.15**
Genetic interactions	-0.11**	0.11**	0.04*
Average epistasis	-0.12**	0.05*	0.10**

* $P < 0.05$; ** $P < 1E-16$.