

Table S4: Multivariable linear regression results. Fit statistics which demonstrate the effect of each other fitted parameter on damping rate. Of particular note is the perturbation type categorical variable, which demonstrates that the presence of siRNA perturbation increases damping rate on average, controlling for changes in other variables. Higher amplitude is also correlated with higher damping rate. However, in total damping rate is poorly predicted by the other fitted variables ($R^2 = 0.169$), indicating it describes an independent oscillatory feature.

Dep. Variable:	Damping Rate	R-squared:	0.169
Model:	OLS	Adj. R-squared:	0.169
Method:	Least Squares	F-statistic:	4782.
Date:	Wed, 11 Feb 2015	Prob (F-statistic):	0.00
Time:	16:26:22	Log-Likelihood:	$-1.7248e + 05$
No. Observations:	94053	AIC:	$3.450e + 05$
Df Residuals:	94048	BIC:	$3.450e + 05$

	coef	std err	t	P> t	[95.0% Conf. Int.]
intercept	-0.0370	0.014	-2.572	0.010	-0.065, -0.009
amplitude	0.2375	0.003	86.282	0.000	0.232, 0.243
period	-0.1521	0.003	56.798	0.000	-0.157, -0.147
phase	-0.2354	0.003	85.598	0.000	-0.241, -0.230
perturbation type	0.3197	0.015	20.664	0.000	0.289, 0.350

Omnibus:	9769.391	Durbin-Watson:	1.876
Prob(Omnibus):	0.000	Jarque-Bera (JB):	18459.719
Skewness:	0.697	Prob(JB):	0.00
Kurtosis:	4.664	Cond. No.	8.34