Supplemental Table S1

Table S1. Statistical analysis of data from Figure 3 and Figure 5. In each table, Student's *t*-test was performed for each pair at each enzyme concentration and the *p*-values are shown. Fisher's method was then used to calculate the combined probability for each pair. Briefly, Chi-square (X^2) was determined by applying the formula: $X^2 = -2 \sum_{i=1}^k \log_e(pi)$, where pi is the *p*-value for the i^{th} test and k is the number of tests. The combined *p*-values were determined from the X^2 values, using 2k degrees of freedom. The difference in the mean is shown if the comparison is significantly different (p < 0.05).

mNeil3 on Tg substrates in Figure 3B					
	[mNeil3]	qTel vs ssR	ssRSC vs ssR	dsTel vs dsR	dsRSC vs dsR
p values from t-test	1	0.154	0.031	0.003	0.075
1	10	0.053	0.001	0.010	0.034
	100	0.159	0.006	0.010	0.010
	500	0.225	0.031	0.005	0.001
p value from Fisher's combined		0.0386*	<0.0001***	<0.0001***	<0.0001***
	1	6.557	20.580	3.500	4.140
Differences in mean	10	14.840	39.560	11.587	19.150
	100	9.447	32.460	26.870	44.013
	500	8.970	17.587	39.940	55.023

В

NEIL1 on Tg substrates in Figure 3C				
	[NEIL1]	qTel vs ssR	ds Tel vs dsR	
p values from t-test	1	0.805	0.068	
	10	0.029	0.146	
	100	0.354	0.181	
p value from Fisher's combined		0.14	0.05	
		No significa	No significant difference	

С

mNeil3 on Gh substr	ates in Figure	5 A
	[mNeil3]	ds Tel vs dsR
p values from t-test	1	0.064
No. of the second secon	10	0.007
	100	0.001
p values from Fishers combined		<0.0001***
	1	-3.753
Differences in mean	10	-52.530
	100	-43.720

D

NEIL1 on Gh substra	ates in Figure	5B
	[NEIL1]	ds Tel vs dsR
p values from <i>t</i> -test	1	0.104
	10	0.001
	100	0.929
p value from Fisher's combined		0.0038**
	1	2.618
Differences in mean	10	19.670
	100	-0.140