

Table S3. The pattern of excess for aff-dec mutations in *sim* is robust to choices of cutoff

SIM	fix	poly#	ratio	FET p
<i>Coding</i>				
Non	312	438	0.71	9E-09
Syn				
<i>No Chg</i>	162	446	0.36	
<i>P->U</i>	449	1714	0.26	0.002
<i>U->P</i>	319	695	0.46	0.04
<i>CRM (aff-dec)</i>				
all	38	35	1.09	2E-05
anc.score>0	31	35	0.89	1E-04
anc.score>2	28	33	0.85	3E-03
(all dec)*	33	38	0.87	4E-04

* in the first three rows in aff-dec class, aff-dec mutations are called when PWM score change<-1, the 4th row is the same as the third with respect to the inclusion of footprint sites except it uses all mutations that has PWM score change<0