

Table S2. Percentage of gain and loss of TFBS predicted by two set of cutoffs

Functional category	Cutoff 80% ^b		Cutoff 0	
	number	%	number	%
Conserved	487	75.6	547	84.8
Weak ^a	124	19.3	70	10.9
Loss				
<i>mel</i>	2	0.3	0	0
<i>sim</i>	16	2.5	16	2.5
Gain				
<i>mel</i>	14	2.2	12	1.9
<i>sim</i>	1	0.2	0	0

^aweak binding sites: due to the arbitrary cutoff applied, for some footprint sites neither *mel* nor *sim* sequence passed the cutoff and are categorized under "weak sites". ^b The 80% cutoff is chosen by ranking all TFBS for a particular TF from high to low by their PWM scores and then taking the 80% quantile.