

**Table S1 Overall performance of motif discovery methods for ENCODE data**

The overall performance of each method is computed by counting the number of success experiments that are equal to or higher than the rank. These are the same data as in Figure 2.

Rank	gem	meme	weeder	mdscan	alignace	posmo	Posmo_5k	ChIP-Munk	ChIP-Munk_5k	hms	hms_5k
Top1	184	179	148	159	156	163	145	175	152	172	156
Top2	192	184	177	163	158	163	160				
Top3	195	187	181	165	163	163	162				
Top4	195	192	182	166	165	163	162				
Top5	196	194	182	169	167	163	162				
Top6	196	195	183	169	169	163	163				