

Table S6. Average information content from different data sources

<i>Data Set</i>	<i>Organism</i>	<i>Mean (\pm Standard Deviation) Information Content (I)</i>	<i>Number of Motifs</i>
RegTransBase [16]**	Bacteria (531 species)	25.1 (\pm 5)	94
Regulon DB [5]	<i>E. coli</i>	20.0 (\pm 9.2)	72
DP Interact [20]*	<i>E. coli</i>	24.3 (\pm 11.6)	68
Average	Bacteria	23.3	
Zhu, et al. [18]	Yeast	13.8 (\pm 2.6)	89
Harbison, et al. [21]*	Yeast	14.1 (\pm 5.7)	102
MacIsaac, et al. [22]*	Yeast	12.5 (\pm 5.1)	124
Average	Yeast	13.4	
JASPER (core) [19]	Multicellular eukaryotes	12.1 (\pm 4.5)	123
FlyReg [23]*	Fly	12.5 (\pm 5.5)	75
Bergman, et al.*	Fly	13.4 (\pm 4.4)	62
Badis, et al. [24]	Mouse (primary motifs)	12.3 (\pm 2.0)	104
Average	Multicellular eukaryotes	12.8	

*These data sets were accessed from STAMP [25]

**Motifs constructed from fewer than 8 sample binding sites were eliminated.