[Wild-type D. melanogaster]

Motif spacing: **10bp**								
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	0	50	0	50	0	50	0
#Correlations	16	96	16	96	16	96	8	96
p(t-test)	$4.83x10^{-4}(1.54x10^{-3})$*		$9.91x10^{-1}(9.91x10^{-1})$		$6.56x10^{-1}(7.50x10^{-1})$		$3.50x10^{-1}(4.38x10^{-1})$	
p(Wilcoxon)	$8.79x10^{-2}(1.41x10^{-1})$		$1.96x10^{-1}(2.61x10^{-1})$		$4.69x10^{-1}(5.36x10^{-1})$		1.00(1.00)	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	25	50	25	50	25	50	25
#Correlations	64	96	64	96	64	96	54	96
p(t-test)	$7.66x10^{-3}(1.53x10^{-2})$*		$8.53x10^{-1}(9.10x10^{-1})$		$3.31x10^{-1}(4.38x10^{-1})$		$4.81x10^{-2}(8.55x10^{-2})$	
p(Wilcoxon)	$5.40x10^{-3}(1.73x10^{-2})$*		$9.52x10^{-1}(1.00)$		$1.83x10^{-1}(2.61x10^{-1})$		$8.58x10^{-2}(1.41x10^{-1})$	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	75	50	75	50	75	50	75
#Correlations	64	96	64	96	64	96	64	96
p(t-test)	$1.40x10^{-1}(2.25x10^{-1})$		$3.55x10^{-1}(4.38x10^{-1})$		$6.26x10^{-3}(1.43x10^{-2})$*		$9.88x10^{-5}(3.95x10^{-4})$*	
p(Wilcoxon)	$2.30x10^{-2}(4.60x10^{-2})$*		$4.11x10^{-1}(5.06x10^{-1})$		$1.00x10^{-2}(2.68x10^{-2})$*		$8.07x10^{-4}(1.28x10^{-2})$*	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	100	50	100	50	100	50	100
#Correlations	16	96	16	96	16	96	16	96
p(t-test)	$1.08x10^{-3}(2.89x10^{-3})$*		$4.82x10^{-6}(2.57x10^{-5})$*		$2.28x10^{-6}(1.82x10^{-5})$*		$3.45x10^{-8}(5.52x10^{-7})$*	
p(Wilcoxon)	$1.31x10^{-2}(2.99x10^{-2})$*		$2.71x10^{-3}(1.28x10^{-2})$*		$1.92x10^{-3}(1.28x10^{-2})$*		$3.20x10^{-3}(1.28x10^{-2})$*	

Table 1: T-test and Wilcoxon-test comparisons of Pearson correlations for motif-pairs at 10bp spacing for varying motif GC and mean exon GC content in Wild-type D. melanogaster. FDR corrected p-values in parenthesis. * suggests rejection of null hypothesis.

Motif spacing: **50bp**								
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	0	50	0	50	0	50	0
#Correlations	16	96	16	96	16	96	4	96
p(t-test)	$2.87x10^{-2}(7.07x10^{-2})$		$4.94x10^{-1}(6.32x10^{-1})$		$9.91x10^{-1}(9.91x10^{-1})$		$5.58x10^{-1}(6.87x10^{-1})$	
p(Wilcoxon)	$5.23x10^{-3}(2.47x10^{-2})$*		$4.38x10^{-1}(5.84x10^{-1})$		$5.35x10^{-1}(6.58x10^{-1})$		1.00(1.00)	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	25	50	25	50	25	50	25
#Correlations	64	96	64	96	64	96	46	96
p(t-test)	$3.89x10^{-1}(5.42x10^{-1})$		$4.87x10^{-1}(6.32x10^{-1})$		$8.69x10^{-1}(9.31x10^{-1})$		$1.63x10^{-1}(2.75x10^{-1})$	
p(Wilcoxon)	$1.58x10^{-1}(2.81x10^{-1})$		$3.29x10^{-1}(4.78x10^{-1})$		$8.94x10^{-1}(9.86x10^{-1})$		$7.97x10^{-1}(9.11x10^{-1})$	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	75	50	75	50	75	50	75
#Correlations	61	96	64	96	64	96	64	96
p(t-test)	$8.73x10^{-1}(9.31x10^{-1})$		$1.15x10^{-1}(2.17x10^{-1})$		$7.15x10^{-2}(1.51x10^{-1})$		$7.53x10^{-2}(1.51x10^{-1})$	
p(Wilcoxon)	$7.82x10^{-1}(9.11x10^{-1})$		$5.49x10^{-2}(1.17x10^{-1})$		$2.04x10^{-1}(3.11x10^{-1})$		$4.30x10^{-3}(2.47x10^{-2})$*	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	100	50	100	50	100	50	100
#Correlations	16	96	16	96	16	96	16	96
p(t-test)	$5.69x10^{-3}(2.00x10^{-2})$*		$1.06x10^{-2}(2.82x10^{-2})$*		$1.36x10^{-3}(5.42x10^{-3})$*		$7.23x10^{-5}(5.78x10^{-4})$*	
p(Wilcoxon)	$9.73x10^{-3}(3.21x10^{-2})$*		$1.74x10^{-2}(4.63x10^{-2})$*		$8.36x10^{-3}(3.21x10^{-2})$*		$2.00x10^{-2}(4.92x10^{-2})$*	

Table 2: T-test and Wilcoxon-test comparisons of Pearson correlations for motif-pairs at 50bp spacing for varying motif GC and mean exon GC content in Wild-type D. melanogaster. FDR corrected p-values in parenthesis. * suggests rejection of null hypothesis.

Motif spacing: **100bp**								
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	0	50	0	50	0	50	0
#Correlations	16	96	16	96	16	96	3	96
p(t-test)	$1.31x10^{-2}(3.14x10^{-2})$*		$2.03x10^{-2}(4.64x10^{-2})$*		$4.54x10^{-1}(5.73x10^{-1})$		$1.06x10^{-4}(5.66x10^{-4})$*	
p(Wilcoxon)	$8.79x10^{-2}(1.62x10^{-1})$		$2.78x10^{-1}(3.92x10^{-1})$		$6.05x10^{-1}(6.92x10^{-1})$		$1.09x10^{-1}(1.87x10^{-1})$	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	25	50	25	50	25	50	25
#Correlations	64	96	64	96	64	96	52	96
p(t-test)	$1.31x10^{-1}(2.17x10^{-1})$		$4.58x10^{-2}(9.16x10^{-2})$		$4.51x10^{-2}(9.16x10^{-2})$		$5.57x10^{-1}(6.38x10^{-1})$	
p(Wilcoxon)	$8.09x10^{-2}(1.62x10^{-1})$		$1.73x10^{-2}(4.63x10^{-2})$*		$1.06x10^{-1}(1.87x10^{-1})$		$4.39x10^{-1}(5.40x10^{-1})$	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	75	50	75	50	75	50	75
#Correlations	64	96	64	96	64	96	64	96
p(t-test)	$3.23x10^{-1}(4.68x10^{-1})$		$6.12x10^{-3}(1.77x10^{-2})$*		$3.11x10^{-1}(4.67x10^{-1})$		$1.28x10^{-3}(4.65x10^{-3})$*	
p(Wilcoxon)	$1.45x10^{-1}(2.40x10^{-1})$		$3.46x10^{-2}(7.90x10^{-2})$		$3.99x10^{-1}(5.33x10^{-1})$		$3.26x10^{-3}(2.23x10^{-2})$*	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	100	50	100	50	100	50	100
#Correlations	16	96	16	96	16	96	16	96
p(t-test)	$5.91x10^{-4}(2.58x10^{-3})$*		$2.93x10^{-9}(7.03x10^{-8})$*		$1.84x10^{-6}(2.19x10^{-5})$*		4.67E-11$(2.24x10^{-9})$*	
p(Wilcoxon)	$1.51x10^{-2}(4.53x10^{-2})$*		$1.12x10^{-3}(1.80x10^{-2})$*		$1.31x10^{-2}(4.18x10^{-2})$*		$7.76x10^{-4}(1.80x10^{-2})$*	

Table 3: T-test and Wilcoxon-test comparisons of Pearson correlations for motif-pairs at 100bp spacing for varying motif GC and mean exon GC content in Wild-type D. melanogaster. FDR corrected p-values in parenthesis. * suggests rejection of null hypothesis.

Motif spacing: **200bp**								
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	0	50	0	50	0	50	0
#Correlations	16	96	16	96	16	96	1	96
p(t-test)	$3.32\text{x}10^{-1}(4.65\text{x}10^{-1})$		$3.40\text{x}10^{-1}(4.66\text{x}10^{-1})$		$1.30\text{x}10^{-1}(2.23\text{x}10^{-1})$		insufficient	
p(Wilcoxon)	$1.09\text{x}10^{-1}(1.91\text{x}10^{-1})$		$3.79\text{x}10^{-1}(5.09\text{x}10^{-1})$		$1.34\text{x}10^{-1}(2.28\text{x}10^{-1})$		data	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	25	50	25	50	25	50	25
#Correlations	64	96	64	96	64	96	47	96
p(t-test)	$2.03\text{x}10^{-1}(3.12\text{x}10^{-1})$		$9.22\text{x}10^{-1}(9.68\text{x}10^{-1})$		$1.50\text{x}10^{-1}(2.43\text{x}10^{-1})$		$9.68\text{x}10^{-1}(9.91\text{x}10^{-1})$	
p(Wilcoxon)	$3.53\text{x}10^{-1}(4.83\text{x}10^{-1})$		$7.58\text{x}10^{-1}(8.69\text{x}10^{-1})$		$2.09\text{x}10^{-1}(3.06\text{x}10^{-1})$		$8.24\text{x}10^{-1}(8.95\text{x}10^{-1})$	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	75	50	75	50	75	50	75
#Correlations	60	96	64	96	64	96	64	96
p(t-test)	$6.78\text{x}10^{-1}(7.63\text{x}10^{-1})$		$3.97\text{x}10^{-3}(1.32\text{x}10^{-2})$*		$7.37\text{x}10^{-3}(2.01\text{x}10^{-2})$*		$7.15\text{x}10^{-2}(1.37\text{x}10^{-1})$	
p(Wilcoxon)	$9.18\text{x}10^{-1}(9.64\text{x}10^{-1})$		$1.00\text{x}10^{-2}(3.95\text{x}10^{-2})$*		$2.78\text{x}10^{-2}(7.00\text{x}10^{-2})$		$2.97\text{x}10^{-2}(7.21\text{x}10^{-2})$	
Exon GC%	**30-40%**		**40-50%**		**50-60%**		**60-70%**	
Motif GC%	50	100	50	100	50	100	50	100
#Correlations	16	96	16	96	16	96	16	96
p(t-test)	$2.75\text{x}10^{-3}(9.63\text{x}10^{-3})$*		$2.84\text{x}10^{-4}(1.49\text{x}10^{-3})$*		$9.10\text{x}10^{-7}(1.43\text{x}10^{-5})$*		$8.96\text{x}10^{-5}(6.08\text{x}10^{-4})$*	
p(Wilcoxon)	$5.23\text{x}10^{-3}(2.84\text{x}10^{-2})$*		$7.03\text{x}10^{-2}(1.53\text{x}10^{-1})$		$3.78\text{x}10^{-3}(2.84\text{x}10^{-2})$*		$2.00\text{x}10^{-2}(5.47\text{x}10^{-2})$	

Table 4: T-test and Wilcoxon-test comparisons of Pearson correlations for motif-pairs at 200bp spacing for varying motif GC and mean exon GC content in Wild-type D. melanogaster. FDR corrected p-values in parenthesis. * suggests rejection of null hypothesis.