[Mutant-r2 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	16	96
p(t-test)	$2.15x10^{-3}(1.15x10^{-2})$*		$3.94x10^{-1}(5.25x10^{-1})$		$2.02x10^{-1}(3.90x10^{-1})$		$9.55x10^{-1}(9.55x10^{-1})$	
p(Wilcoxon)	$6.05x10^{-1}(6.45x10^{-1})$		$5.69x10^{-1}(6.45x10^{-1})$		$3.26x10^{-1}(4.74x10^{-1})$		$1.48x10^{-1}(3.38x10^{-1})$	
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	64	96
p(t-test)	$2.19x10^{-1}(3.90x10^{-1})$		$9.51x10^{-1}(9.55x10^{-1})$		$5.28x10^{-2}(1.41x10^{-1})$		$2.93x10^{-1}(4.69x10^{-1})$	
p(Wilcoxon)	$3.09x10^{-1}(4.74x10^{-1})$		$5.74x10^{-1}(6.45x10^{-1})$		$5.25x10^{-2}(1.88x10^{-1})$		$2.83x10^{-2}(1.51x10^{-1})$	
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)	$3.26x10^{-1}(4.75x10^{-1})$		$8.44x10^{-1}(9.55x10^{-1})$		$4.35x10^{-3}(1.39x10^{-2})$*		$4.50x10^{-1}(5.54x10^{-1})$	
p(Wilcoxon)	$2.47x10^{-1}(4.40x10^{-1})$		$5.43x10^{-1}(6.45x10^{-1})$		$6.11x10^{-3}(9.77x10^{-2})$		$9.15x10^{-1}(9.15x10^{-1})$	
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)	$1.06x10^{-5}(1.69x10^{-4})$*		$3.16x10^{-3}(1.26x10^{-2})$*		$7.19x10^{-4}(5.75x10^{-3})$*		$6.88x10^{-2}(1.57x10^{-1})$	
p(Wilcoxon)	$2.62x10^{-2}(1.51x10^{-1})$		$7.03x10^{-2}(1.88x10^{-1})$		$6.27x10^{-2}(1.88x10^{-1})$		$1.79x10^{-1}(3.58x10^{-1})$	

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 Mutant-r2 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	13	96
p(t-test)	$9.09x10^{-1}(9.65x10^{-1})$		$8.87x10^{-1}(9.65x10^{-1})$		$2.40x10^{-1}(4.53x10^{-1})$		$9.65x10^{-1}(9.65x10^{-1})$	
p(Wilcoxon)	$8.79x10^{-2}(3.13x10^{-1})$		$5.35x10^{-1}(7.35x10^{-1})$		$1.79x10^{-1}(4.09x10^{-1})$		$8.07x10^{-1}(8.61x10^{-1})$	
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	64	96
p(t-test)	$2.31x10^{-1}(4.53x10^{-1})$		$7.02x10^{-1}(8.99x10^{-1})$		$2.30x10^{-1}(4.53x10^{-1})$		$2.62x10^{-3}(2.02x10^{-2})$*	
p(Wilcoxon)	$4.85x10^{-2}(2.80x10^{-1})$		$2.11x10^{-1}(4.40x10^{-1})$		$1.11x10^{-1}(3.57x10^{-1})$		$1.63x10^{-3}(5.23x10^{-2})$	
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)	$8.67x10^{-1}(9.65x10^{-1})$		$6.63x10^{-1}(8.85x10^{-1})$		$2.96x10^{-1}(4.99x10^{-1})$		$1.24x10^{-1}(3.98x10^{-1})$	
p(Wilcoxon)	$5.47x10^{-1}(7.35x10^{-1})$		$7.99x10^{-1}(8.61x10^{-1})$		$6.78x10^{-1}(7.75x10^{-1})$		$2.34x10^{-1}(4.40x10^{-1})$	
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)	$4.76x10^{-2}(2.11x10^{-1})$		$6.06x10^{-1}(8.43x10^{-1})$		$1.42x10^{-1}(4.13x10^{-1})$		$2.07x10^{-1}(4.53x10^{-1})$	
p(Wilcoxon)	$6.42x10^{-1}(7.60x10^{-1})$		$9.59x10^{-1}(9.59x10^{-1})$		$1.63x10^{-1}(4.09x10^{-1})$		$2.34x10^{-1}(4.40x10^{-1})$	

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 Mutant-r2 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	15	96
p(t-test)	$7.05x10^{-1}(8.67x10^{-1})$		$1.84x10^{-1}(4.81x10^{-1})$		$4.86x10^{-1}(6.86x10^{-1})$		$2.26x10^{-1}(4.81x10^{-1})$	
p(Wilcoxon)	$7.56x10^{-1}(8.44x10^{-1})$		$1.63x10^{-1}(3.90x10^{-1})$		$4.69x10^{-1}(6.82x10^{-1})$		$1.06x10^{-2}(1.27x10^{-1})$	
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	64	96
p(t-test)	$4.70x10^{-1}(6.86x10^{-1})$		$7.37x10^{-1}(8.85x10^{-1})$		$3.07x10^{-2}(1.47x10^{-1})$		$5.19x10^{-1}(7.12x10^{-1})$	
p(Wilcoxon)	$5.74x10^{-1}(7.07x10^{-1})$		$3.92x10^{-1}(6.07x10^{-1})$		$5.93x10^{-2}(2.73x10^{-1})$		$9.09x10^{-1}(9.34x10^{-1})$	
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)	$2.98x10^{-1}(5.10x10^{-1})$		$5.60x10^{-3}(3.36x10^{-2})$*		$4.78x10^{-1}(6.86x10^{-1})$		$9.54x10^{-1}(9.65x10^{-1})$	
p(Wilcoxon)	$2.83x10^{-2}(1.94x10^{-1})$		$8.69x10^{-2}(3.01x10^{-1})$		$3.00x10^{-1}(5.12x10^{-1})$		$3.00x10^{-1}(5.12x10^{-1})$	
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)	$8.31x10^{-3}(4.43x10^{-2})$*		$1.86x10^{-5}(4.47x10^{-4})$*		$2.92x10^{-1}(5.10x10^{-1})$		$1.10x10^{-1}(3.76x10^{-1})$	
p(Wilcoxon)	$1.09x10^{-1}(3.34x10^{-1})$		$4.46x10^{-3}(9.77x10^{-2})$		$4.69x10^{-1}(6.82x10^{-1})$		$1.63x10^{-1}(3.90x10^{-1})$	

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 Mutant-r2 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	13	96
p(t-test)	$6.07x10^{-1}(7.94x10^{-1})$		$3.26x10^{-1}(5.97x10^{-1})$		$3.60x10^{-1}(6.33x10^{-1})$		$6.23x10^{-1}(7.98x10^{-1})$	
p(Wilcoxon)	$9.59x10^{-1}(9.59x10^{-1})$		$6.79x10^{-1}(8.05x10^{-1})$		$2.55x10^{-1}(5.63x10^{-1})$		$6.00x10^{-1}(7.90x10^{-1})$	
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	63	96
p(t-test)	$6.08x10^{-1}(7.94x10^{-1})$		$8.93x10^{-1}(9.68x10^{-1})$		$8.18x10^{-2}(3.27x10^{-1})$		$9.68x10^{-1}(9.68x10^{-1})$	
p(Wilcoxon)	$5.70x10^{-1}(7.90x10^{-1})$		$5.12x10^{-1}(7.90x10^{-1})$		$5.67x10^{-2}(3.34x10^{-1})$		$7.17x10^{-1}(8.20x10^{-1})$	
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)	$2.54x10^{-1}(5.60x10^{-1})$		$1.52x10^{-2}(9.73x10^{-2})$		$6.01x10^{-1}(7.94x10^{-1})$		$3.66x10^{-1}(6.33x10^{-1})$	
p(Wilcoxon)	$6.40x10^{-1}(7.90x10^{-1})$		$9.32x10^{-2}(3.73x10^{-1})$		$6.25x10^{-1}(7.90x10^{-1})$		$5.88x10^{-1}(7.90x10^{-1})$	
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)	$5.47x10^{-1}(7.78x10^{-1})$		$1.06x10^{-1}(3.90x10^{-1})$		$5.52x10^{-2}(2.52x10^{-1})$		$4.57x10^{-1}(7.23x10^{-1})$	
p(Wilcoxon)	$7.17x10^{-1}(8.20x10^{-1})$		$3.52x10^{-1}(6.63x10^{-1})$		$6.42x10^{-1}(7.90x10^{-1})$		$9.18x10^{-1}(9.47x10^{-1})$	

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 Mutant-r2 type D. melanogaster. FDR corrected p-values in parenthesis. * suggests rejection of null hypothesis.