APPENDICES

Appendix 1: Frequencies of Significant Heptamers at the level $\alpha = 10^{-5}$

Heptamer	DMR-CGIs	Control CGIs	LOD	*p*-value
ACACACA	0.0002339	0.0006223	-1.41	2.80E-06
AGGCGGC	0.0000439	0.0003064	-2.80	1.39E-06
CACACAC	0.0003070	0.0007220	-1.23	4.30E-06
CCGCCGC	0.0002485	0.0009788	-1.98	3.28E-13
CGCCGCC	0.0002485	0.0009383	-1.92	2.60E-12
CGCCGCG	0.0001316	0.0004528	-1.78	3.52E-06
CGCGGCG	0.0001316	0.0004528	-1.78	3.52E-06
CGGCGGC	0.0001900	0.0008085	-2.09	8.78E-12
GCCGCCG	0.0001900	0.0008085	-2.09	8.78E-12
GCCGCCT	0.0000439	0.0003064	-2.80	1.39E-06
GCGCCGC	0.0001754	0.0005408	-1.62	1.69E-06
GCGGCGC	0.0001754	0.0005408	-1.62	1.69E-06
GCGGCGG	0.0002485	0.0009788	-1.98	3.28E-13
GGCGGCG	0.0002485	0.0009383	-1.92	2.60E-12
GTGTGTG	0.0003070	0.0007220	-1.23	4.30E-06
TGTGTGT	0.0002339	0.0006223	-1.41	2.80E-06
AAAATTT	0.0001462	0.0000230	2.67	8.81E-07
AAATTTG	0.0001608	0.0000168	3.26	3.73E-09
AAATTTT	0.0001462	0.0000230	2.67	8.81E-07
AAGCCCT	0.0002631	0.0000728	1.85	1.33E-06
ACAACTC	0.0001754	0.0000408	2.10	7.64E-06
ACAATGC	0.0001462	0.0000293	2.32	8.45E-06
ACTAATG	0.0001169	0.0000091	3.68	2.25E-08
AGCAGGG	0.0003801	0.0001454	1.39	5.81E-06
AGCCGAG	0.0008332	0.0001789	2.22	3.12E-21
AGGGCTT	0.0002631	0.0000728	1.85	1.33E-06
ATGAGCA	0.0001900	0.0000381	2.32	6.86E-07
ATGTGAC	0.0002339	0.0000246	3.25	3.90E-12
ATTAGTA	0.0001023	0.0000064	4.00	2.22E-08
ATTGCAA	0.0001169	0.0000172	2.77	4.06E-06
ATTTAGG	0.0001316	0.0000216	2.61	3.59E-06
CAAATTT	0.0001608	0.0000168	3.26	3.73E-09
CAACACG	0.0001608	0.0000327	2.30	4.23E-06
CAGCCGA	0.0003070	0.0000959	1.68	1.64E-06
CATGTGA	0.0001900	0.0000249	2.93	4.08E-09
CATTAGT	0.0001169	0.0000091	3.68	2.25E-08
CCCCCAA	0.0003655	0.0001157	1.66	2.90E-07
CCCCCCC	0.0012133	0.0003368	1.85	1.07E-22
CCCTGCT	0.0003801	0.0001454	1.39	5.81E-06

CCGAGCC	0.0008186	0.0002751	1.57	1.08E-12
CCTAAAT	0.0001316	0.0000216	2.61	3.59E-06
CCTGCTC	0.0004970	0.0001958	1.34	6.41E-07
CGAATGA	0.0001169	0.0000173	2.75	4.40E-06
CGAGCCG	0.0004970	0.0001869	1.41	2.26E-07
CGCCAAC	0.0002339	0.0000656	1.83	5.07E-06
CGCGGCA	0.0004532	0.0001309	1.79	1.95E-09
CGGCTCG	0.0004970	0.0001869	1.41	2.26E-07
CGTGTTG	0.0001608	0.0000327	2.30	4.23E-06
CTCGGCT	0.0008332	0.0001789	2.22	3.12E-21
GAGCAGG	0.0004970	0.0001958	1.34	6.41E-07
GAGCCGA	0.0005409	0.0001335	2.02	8.51E-13
GAGTTGT	0.0001754	0.0000408	2.10	7.64E-06
GCATTGT	0.0001462	0.0000293	2.32	8.45E-06
GCCGAGC	0.0009648	0.0002779	1.80	1.00E-17
GCGCCAA	0.0002777	0.0000818	1.76	1.86E-06
GCGGCAA	0.0003508	0.0000871	2.01	5.16E-09
GCTCGGC	0.0009648	0.0002779	1.80	1.00E-17
GGCTCGG	0.0008186	0.0002751	1.57	1.08E-12
GGGGGGG	0.0012133	0.0003368	1.85	1.07E-22
GTCACAT	0.0002339	0.0000246	3.25	3.90E-12
GTGACAA	0.0002777	0.0000349	2.99	1.56E-12
GTTGGCG	0.0002339	0.0000656	1.83	5.07E-06
GTTGTCA	0.0002339	0.0000317	2.88	1.93E-10
TACTAAT	0.0001023	0.0000064	4.00	2.22E-08
TAGTACA	0.0000877	0.0000100	3.13	7.81E-06
TCACATG	0.0001900	0.0000249	2.93	4.08E-09
TCATTCG	0.0001169	0.0000173	2.75	4.40E-06
TCGGCTC	0.0005409	0.0001335	2.02	8.51E-13
TCGGCTG	0.0003070	0.0000959	1.68	1.64E-06
TGACAAC	0.0002339	0.0000317	2.88	1.93E-10
TGCCGCA	0.0003216	0.0000868	1.89	8.35E-08
TGCCGCG	0.0004532	0.0001309	1.79	1.95E-09
TGCGGCA	0.0003216	0.0000868	1.89	8.35E-08
TGCTCAT	0.0001900	0.0000381	2.32	6.86E-07
TGTACTA	0.0000877	0.0000100	3.13	7.81E-06
TGTCACA	0.0002193	0.0000332	2.72	2.80E-09
TGTGACA	0.0002193	0.0000332	2.72	2.80E-09
TTGCAAT	0.0001169	0.0000172	2.77	4.06E-06
TTGCCGC	0.0003508	0.0000871	2.01	5.16E-09
TTGGCGC	0.0002777	0.0000818	1.76	1.86E-06
TTGGGGG	0.0003655	0.0001157	1.66	2.90E-07
TTGTCAC	0.0002777	0.0000349	2.99	1.56E-12