

**Table S2 part I**

DMR coordinates	Genomic position	Evidence for a role in <i>cis</i> regulation from ENCODE (51)
<b>DMR1</b> MMU12:19181482-19182200	CpG island, multiple homologous copies as part of a segmental duplication.	- ESC DNasel hypersensitivity (HS)
<b>DMR2</b> MMU12:111666100-111666400	CpG island 57.8kb upstream of <i>Ppp2r5c</i> (52)	- Heart (8 weeks): H3K36m3 - Liver (8 weeks): H3K36m3
<b>DMR3</b> MMU15:78370350-78370800	CpG island in last exon of <i>Sstr3</i> (52).	- Cerebellum (8 weeks): H3K4m1 - C2C12 myocytes: Myogenin bound - Heart (8 week): H3K36m3, Pol2 bound
<b>DMR4</b> MMU1:39654450-39655100	Intergenic	Immediately 5' of a region enriched in: - Cerebellum (8 weeks): H3K4m1, DNasel HS - Cerebrum (8 weeks): DNasel HS - Liver (8 weeks): H3K4m1, H3K36m3
<b>DMR5</b> MMU3:142351001-142351500	Intergenic	- G1E: DNase I HS - CH12: H3K9me3 - Erythroblast H3K9me3 - Megakaryocyte H3K27me3 - Liver (8 weeks) H3K27me3 - Heart (8weeks) H3K27me3
<b>DMR6</b> MMU17:39984601-39985700	In <i>Rn45S</i> coding region	- Liver, Heart, Cerebellum (all at 8 weeks): H3K4me1, H3K4me3, H3K27me3, H3K36me3 - Cerebellum, heart (8 weeks): CTCF binding - Cerebellum, cerebrum, whole brain and ES-CJ7: DNase I HS
<b>DMR7</b> MMU10:80033801-80034300	Intergenic	- Cerebellum (8weeks) H3K4me1, H3K27ac, Pol2 - Heart (8weeks): H3K4me1 - Liver E14.5: H3K4me1 H3K4me3, H3K27a, H3K79me2 - MEL: H3K4m1, H3K4me3, H3K27a M3K36m3, Pol2 - GIE: DNasel HS - CH12 cells: H3K4me3/pol2 - Erythroblasts and megakaryocytes: H3K4me1 M3K4me3
<b>DMR8</b> MMU7: 137835001-137836500	Intron of <i>Tacc2</i>	- Cerebellum H3K4m3, H3K27me3, H3K27ac - Cerebrum, whole brain E14.5 and 8weeks DNase I HS - ES-CJ7 DNase I HS - Heart E14.5 H3K4m1, Heart 8w H3K4m3, H3K27me3 H3K79m3, CTCF and Pol2 binding - Liver (8weeks): H3K79me2 - CH12: H3K36me3 - Megakaryocyte H3K36m3
<b>DMR9:</b> MMU7:53354201-53354900	Exon1 of <i>Kcnj11</i>	- Cerebellum H3K4m1, H3K27ac - Heart E14.5 H3K4m1, Heart 8w H39ac, H3K27ac H3K27m3, CTCF and Pol2 binding - Liver (8weeks): H3K27me3 - CH12: H3K27me3 - Megakaryocyte H3K9m3, H3k27m3
<b>DMR10:</b> MU11:33922001-33922500	Intergenic	- CH12: H3K9me3 - Megakaryocyte H3K4m1 - Heart 8w H3K27m3
<b>DMR11:</b> MMU14:75925601-75926100	Exon2 of <i>Siah3</i>	- Liver E.14.5 H3K4m1, H3K4m3, H3K27ac, H3K36m3 - MEL H3K4m1, H3K4m3, H3K9ac, H3K27ac, H3K36m3, p300 and Pol2 binding, DNasel HS - Erythroblast H3K4m1 - MEL H3K4m3, H3K9m3, H3K27m3
<b>DMR12:</b> MMU5:26397201-26397700	Intergenic	- GIE: DNasel HS - CH12 H3K9m3 - Erythroblast H3K27m3 - Megakaryocyte H3K27m3 - ES-CJ7 DNasel HS

**Table S2 part II**

DMR coordinates	Genomic position	Evidence for a role in <i>cis</i> regulation from ENCODE (51)
<b>DMR13:</b> MMU2:172688001-172688500	Intergenic	- Cerebellum H3K4m3 - Cerebrum and brain DNasel HS - Heart E14.5 H3K4m1, H3K27a. 8weeks: H3K27m3 - Liver H3K27m3 - G1E DNasel HS - CH12 J3K9m3, H3K27m3 - ES-CJ7 DNasel HS
<b>DMR14:</b> MMU12:107752401-107752500	Intergenic	- CH12 H3K9m3 - Erythroblast H3K9m3 - Megakaryocyte H3K9m3
<b>DMR15:</b> MMU11:46390601-46391100	Exon 3 <i>Bc053393</i>	
<b>DMR16:</b> MMU7: 10836601-10837100	Intergenic	- Megakaryocyte H3K9m3
<b>DMR17:</b> MMU10:120699201-120699700	Intergenic	- MEL H3K4m1, H3K36m3 - Megakaryocyte H3K9m3

**Table S2:** Analysis of validated DMRs using the ENCODE (51) datasets suggests cell-type specific enrichment of histone modifications and transcription factor binding characteristic of a role in *cis* regulation of transcription.