

Table S1

	DHS 1	DHS 2	DHS 3	DHS "R"	DHS 4	DHS 5	DHS 6	DHS 7
Coordinates (hg19, chr14)	57,197,081-57,197,624	57,208,951-57,209,448	57,218,296-57,218,708	57,221,649-57,222,405	57,227,265-57,227,738	57,261,971-57,262,522	57,276,973-57,277,519	57,278,349-57,278,688
Position Rel. TSS (long isoform)	+80,000	+68,000	+59,000	+55,000	+50,000	+15,000	0	-1000
Differential Accessibility?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Predicted Function *	Enhancer	N.D.	Insulator	Strong Enhancer	Enhancer	Enhancer	Active Promoter	Active Promoter
Actual Function	Enhancer	N.D.	Insulator	Inducible Repressor	Enhancer	None Found	Promoter	Promoter/Enhancer
Functional Specificity	No	N.D.	N.D.	N.D.	Yes	N.D.	No	No
Known Status in Human CNS	RB DHS	RB DHS	No hypersensitivity	RB DHS	RB DHS	RB DHS (weak)	RB DHS	No hypersensitivity
Known Status in Mouse CNS	WB H3K4me1 (weak)	N.D.	No histone marks or DHS's	WB & CB H3K4me1, WB H3K27Ac	WB H3K4me1, WB H3K27Ac (weak)	WB & CB H3K4me1, WB H3K27Ac	WB & CB H3K4me3, WB & CB H3K27Ac	WB H3K4me1, WB & CB H3K27Ac
Known TF Binding			CTCF (MB, RB, ES)	CRX (eye)				
Conservation (Alignment)	Xenopus (88%, 98bp)	Xenopus (90%, 428bp)	Mammals (86%, 256bp)	Xenopus (86%, 52bp)	Xenopus (100%, 42bp)	Xenopus (80%, 159bp)	Zebrafish (75%, 35bp)	Mammals (95%, 335bp)
Homology to Ms (% Identity)	94%	94%	86%	90%	92%	90%	90%	95%
Homology to Ms (Location, chr14)	49,200,069-49,200,450	49,212,826-49,213,316	49,225,083-49,225,338	49,228,290-49,228,866	49,236,689-49,236,966	49,272,515-49,272,725	49,287,095-49,287,474	49,288,235-49,288,569
Activity Detected in Mouse [§]	None	None	None	Nasal Cavity**	Nasal Cavity**	Nasal Placode	N.D.	N.D.

"Known Status in Mouse CNS" refers to E14.5 forebrain or adult cerebellum from Ref. 38.

"Conservation (Alignment)" identity comparisons with mammals use the mouse genome as a reference sequence

*Based on classification system proposed in Ref. 39, predicted from histone status (H3K4me1, H3K4me3, H3K27Ac), DNase sensitivity, and CTCF binding in mouse embryonic whole brain or adult cerebellum from Ref. 38.

§Assessed (at embryonic timepoints only) in Refs. 11-13.

**DHS 4 and DHS "R" reside in the in same fragment assayed

Abbreviations: CNS, central nervous system; Ms, mouse; WB, whole embryonic brain; CB, cerebellum; RB, retinoblastoma; MB, medulloblastoma