

Table S2: Distributions of CpG sites in KDM genes

Subfamily	Gene symbol ^a	Gene name	Chromosome	N of CpG sites						Total
				TSS1500	TSS200	3'UTR	5'UTR	1stExon	Body	
KDM1	KDM1A	lysine demethylase 1A	1p36.12	1	2	0	0	5	1	9
	KDM1B	lysine demethylase 1B	6p22.3	4	3	0	1	0	1	11
KDM2	KDM2A	lysine demethylase 2A	11q13.1	5	0	1	3	4	18	31
	KDM2B	lysine demethylase 2B	12q24.31	3	11	1	1	1	55	72
KDM3	KDM3A	lysine demethylase 3A	2p11.2	6	0	1	10	0	2	18
	KDM3B	lysine demethylase 3B	5q31	3	3	1	0	2	2	11
KDM4	KDM4A	lysine demethylase 4A	1p34.1	3	5	1	4	3	5	21
	KDM4B	lysine demethylase 4B	19p13.3	2	1	2	11	0	78	94
	KDM4C	lysine demethylase 4C	9p24-p23	2	0	0	9	0	4	15
	KDM4D	lysine demethylase 4D	11q21	0	4	1	2	4	0	11
	KDM4E	lysine demethylase 4E	11q21	1	1	1	0	0	0	3
KDM5	KDM5A	lysine demethylase 5A	12p13.33	4	1	0	6	3	0	14
	KDM5B	lysine demethylase 5B	1q32.1	1	2	0	0	2	6	11
	KDM5C ^b	lysine demethylase 5C	Xp11.22-p11.21	-	-	-	-	-	-	-
	KDM5D ^b	lysine demethylase 5D	Yq11	-	-	-	-	-	-	-
KDM6	KDM6A ^b	lysine demethylase 6A	Xp11.2	-	-	-	-	-	-	-
	KDM6B	lysine demethylase 6B	17p13.1	3	0	10	12	0	10	35
KDM7	KDM7A	lysine demethylase 7A	7q34	6	0	0	0	0	6	12
-	PHF8 ^b	PHD finger protein 8	Xp11.22	-	-	-	-	-	-	-
-	PHF2	PHD finger protein 2	9q22	3	0	1	0	0	3	7
-	KDM8	lysine demethylase 8	16p12.1	6	0	1	4	3	4	18
Total				53	33	21	63	27	196	393

TSS, transcription start site; UTR, untranslation region.

^aThe 21 genes are classified into KDM family (<http://www.genenames.org/cgi-bin/genefamilies/set/485>)

^bnot included in the initial analysis due to its location in sex chromosomes