

Table S9 Summary of genomic regions showing parent-of-origin specific differences in methylation^a

#	Chr	Start [bp]	End [bp]	Region Size [bp]	CGI ^b	TSS ^c	Exonic	Intronic	Intergenic ^d	Gene ID	Gene Name	CpGs In Region	CpGs Analysed				CpGs Significantly Differentially Methylated				Mean Methylation Difference Across Region [%]				Max. Mean Methylation Difference [%]	Allele Showing Increased Methylation ^e							
													BN Chromosomes		SHR Chromosomes		BN Chromosomes		SHR Chromosomes		BN Chromosomes		SHR Chromosomes			BN Chromosomes		SHR Chromosomes		BN Chromosomes	SHR Chromosomes	BN Chromosomes	SHR Chromosomes
													Forward Strand	Reverse Strand	Forward Strand	Reverse Strand	Forward Strand	Reverse Strand	Forward Strand	Reverse Strand	Forward Strand	Reverse Strand	Forward Strand	Reverse Strand		Forward Strand	Reverse Strand	Forward Strand	Reverse Strand				
1	1	7,882,907	7,883,212	306	+	+				ENSRNOG000000025587	Plagl1	30	0	0	28	0	0	0	28	0	0	0	98	-	-	98	-	-	M	-	-		
2	3	165,214,162	165,214,636	475	+	+				ENSRNOG000000025889	GNAS3_RAT	34	27	27	0	0	27	16	0	0	97	97	-	-	97	P	P	-	-	-			
3	1	202,827,298	202,827,575	278	+		+			-	-	16	10	10	0	13	5	10	0	13	94	68	-	51	94	P	P	-	-	P			
4	14	92,910,245	92,910,575	331	+	+				ENSRNOG000000004290	Grb10	39	15	15	38	38	14	5	33	38	84	83	89	93	83	M	M	M	M	M			
5	7	110,540,579	110,542,198	1,510	+		+			ENSRNOG000000027569	Trappc9	74	24	24	13	0	22	0	11	0	88	91	79	-	91	P	P	P	-	-			
6	1	202,828,927	202,829,773	847	+					-	-	1	0	0	0	1	0	0	0	1	-	-	-	86	86	-	-	-	-	P			
7	7	131,720,145	131,720,145	1						-	-	2	0	0	2	0	0	0	2	0	-	-	-	86	86	-	-	-	-	M			
8	7	110,542,698	110,542,705	8	+					ENSRNOG000000027569	Trappc9	7	7	7	4	0	7	0	4	0	85	-	81	-	85	P	-	P	-	-			
9	1	202,828,176	202,828,269	94	+					-	-	15	15	15	6	0	15	0	6	0	80	-	67	-	80	P	-	P	-	-			
10	6	134,118,057	134,118,457	401	+					NR_027652	Meg3	5	5	5	4	0	5	0	4	0	76	-	76	-	76	P	-	P	-	-			
11	9	61,924,058	61,924,152	95						-	-	17	4	6	0	3	2	6	0	3	64	37	-	73	64	P	P	-	-	P			
12	9	61,942,510	61,943,368	859	+					-	-	7	7	7	2	0	6	0	0	0	72	-	40	-	72	P	-	P	-	-			
13	8	94,777,428	94,777,580	153						-	-	1	1	1	1	0	1	0	0	70	-	12	-	70	P	-	P	-	-				
14	2	144,587,430	144,587,430	1						-	-	1	0	0	1	0	0	0	1	0	-	-	69	-	69	-	-	-	M	-	-		
15	14	103,657,709	103,657,709	1	+	+				ENSRNOG00000009281	Commd1	1	0	0	1	0	0	0	1	0	-	-	69	-	69	-	-	-	M	-	-		
16	3	160,066,888	160,067,025	138						-	-	11	11	11	11	7	10	0	11	0	35	52	35	69	69	M	M	M	M	M			
17	8	94,766,769	94,766,769	1						-	-	1	0	1	0	1	0	1	0	1	-	68	-	45	68	-	-	P	-	-			
18	8	109,556,004	109,556,004	1						-	-	1	1	1	0	0	1	0	0	0	68	-	-	-	68	M	-	-	-	-			
19	9	61,921,110	61,921,492	383						-	-	8	8	8	3	0	7	0	3	0	65	-	67	-	67	P	-	-	-	-			
20	3	89,680,758	89,680,758	1						-	-	1	0	0	0	0	0	0	0	0	-	-	66	-	66	-	-	-	M	-	-		
21	8	94,782,149	94,782,430	282						-	-	8	0	0	0	5	0	7	0	5	-	39	-	66	66	-	-	P	-	-			
22	9	61,925,095	61,925,565	471						-	-	9	9	9	8	0	4	0	7	0	49	-	65	-	65	P	-	-	-	-			
23	20	4,748,306	4,748,306	1						-	-	1	1	1	0	0	1	0	0	0	64	-	-	-	64	P	-	-	-	-			
25	3	153,811,885	153,812,253	369	+	+				ENSRNOG00000007044	L3mbtl1	15	6	6	15	9	6	3	9	0	46	64	44	32	64	M	M	M	M	M			
27	1	202,825,223	202,825,540	318	+	+				ENSRNOG000000020367	Mir675	12	0	12	0	10	0	12	0	9	-	61	-	55	61	-	-	P	-	-	-		
28	9	61,944,112	61,944,891	580						-	-	15	13	13	7	0	12	0	7	0	44	-	59	-	59	P	-	-	-	-			
29	13	68,353,604	68,353,604	1						ENSRNOG00000002680	Lamc1	1	0	1	0	0	0	1	0	0	-	58	-	-	-	58	-	-	M	-	-		
31	17	21,987,909	21,987,909	1	+					-	-	1	0	0	0	1	0	0	0	1	-	25	-	57	57	-	-	P	-	-	-		
33	8	94,767,563	94,767,570	8						-	-	3	0	0	0	3	0	0	0	3	-	-	-	57	57	-	-	-	-	M			
35	3	127,615,693	127,615,693	1						-	-	1	1	1	1	0	1	0	0	0	55	-	29	-	55	P	-	-	-	-			
41	6	134,055,793	134,055,804	12						-	-	2	2	2	2	2	2	0	0	0	52	-	33	13	52	P	-	-	-	-			
42	19	39,281,737	39,281,739	3	+					-	-	2	2	2	2	2	0	2	0	0	33	52	6	26	52	M	M	M	M	M			
43	6	134,043,873	134,044,038	166	+					-	-	8	8	8	8	0	3	0	0	0	51	-	25	-	51	P	-	-	-	-			
44	1	23,480,272	23,480,364	93	+					-	-	12	10	10	9	9	3	0	0	0	50	-	26	9	50	M	-	-	-	-	M		
45	4	202,918,734	202,919,023	290	+					-	-	4	4	4	3	0	4	0	3	0	50	-	50	-	50	P	-	-	-	-			
46	9	61,920,167	61,920,305	139	+					-	-	3	3	3	0	0	0	0	2	0	21	-	49	-	49	P	-	-	-	-			
47	1	84,804,885	84,804,885	1						ENSRNOG000000042096	Zfp30	1	0	0	0	1	0	0	0	1	-	-	-	49	49	-	-	-	-	M	-	-	
48	20	4,901,463	4,901,647	185						-	-	8	5	5	8	0	4	0	0	0	49	-	13	-	49	M	-	-	-	-			
55	3	5,591,183	5,591,183	1						ENSRNOG000000032782	Abo	1	0	1	0	0	0	1	0	0	-	45	-	-	-	45	-	-	M	-	-		
56	14	92,700,847	92,700,847	1	+					ENSRNOG000000004372	Ddc	1	1	1	1	0	1	0	0	0	45	-	17	-	45	M	-	-	-	-			
60	14	93,055,005	93,055,005	1						-	-	1	1	1	1	0	0	0	0	1	43	-	44	-	44	M	-	-	-	-			
61	4	65,562,379	65,562,395	17	+					ENSRNOG000000013378	Svopl	2	0	0	0	2	0	0	0	2	-	31	-	44	44	-	-	M	-	-	-		
63	1	112,729,274	112,729,274	1						-	-	1	0	0	1	0	0	0	1	0	-	6	-	43	43	-	-	P	-	-	-		
64	8	46,339,335	46,339,335	1						-	-	1	1	1	1	0	1	0	0	0	43	-	5	-	43	M	-	-	-	-			
65	5	151,870,240	151,870,409	170	+					ENSRNOG00000008600	Sytl1	8	0	8	0	8	0	7	0	1	-	43	-	20	43	-	-	M	-	-	-	M	
66	17	60,593,264	60,593,264	1						-	-	1	1	1	1	1	1	0	0	0	42	11	0	9	42	M	M	M	M	M			
73	10	60,886,318	60,886,320	3						ENSRNOG000000029537	Or1e1	2	2	2	2	2	0	0	2	0	21	-	39	-	39	M	-	-	-	-			
74	14	9,489,287	9,489,287	1	+					-	-	1	1	1	1	0	1	0	0	0	39	-	4	-	39	P	-	-	-	-			
77	2	28,379,619	28,379,619	1						-	-	1	1	1	1	0	0	0	1	0	6	-	39	-	39	M	-	-	-	-			
78	4	62,776,202	62,776,202	1						-	-	1	0	0	1	1	0	0	1	0	-	39	-	39	-	39	-	-	-	-	P		
79	14	18,639,418	18,639,756	339						ENSRNOG000000021347	Mthfd2l	20	8	19	8	19	0	12	0	10	8	27	38	21	38	M	M	M	M	M			
81	14	92,850,225	92,850,398	174	+					ENSRNOG000000004290	Grb10	10	10	10	10	0	9	0	7	0	38	-	36	-	38	P	-	-	-	-			
84	19	12,443,227	12,443,227	1						ENSRNOG000000013742	Large	1	1	1	1	0	1	0	0	0	36	-	13	-	36	P	-	-	-	-			
85	14	18,997,415	18,997,782	368	+					ENSRNOG000000042849	Afm	18	0	0	0	17	0	0	0	14	-	1	-	36	36	-	-	M	-	-	-		
86	17	1,854,518	1,854,518	1						-	-	1	1	1	1	0	1	0	0	0	36	-	4	-	36	M	-	-	-	-			
87	1	113,872,519	113,872,519	1	+					-	-	1	0	1	0	1	0	1	0	0	-	36	-	2	36	-	-	P	-	-	-		
88	15	70,910,698	70,910,698	1						-	-	1	1	1	1	0	0	0	1	0	4	-	36	-	36	M	-	-	-	-			
89	17	83,654,995	83,6																														

