

**Supplemental Table 1, Related to Figures 3 and 5: Table of the primers used in this study**

ID	Name	Organism	Sequence	Use	Assay
DC_h_45	RPLP0 forward	human	CCTCACTGAGATCAGGGACATGTTGC	RNA expression	qPCR
DC_h_47	RPLP0 reverse	human	TGGTGCCCCCTGGAGATTAGTGG	RNA expression	qPCR
DC_h_362	Pcdha4 as-lncRNA forward	human	TGGTAAAGACCGACATCATGTG	RNA expression	qPCR
DC_h_363	Pcdha4 as-lncRNA reverse	human	ATGTGGACGTTGATCTCTCAGC	RNA expression	qPCR
DC_h_19	Pcdha4 s-cRNA forward	human	CAGAGAAGATCAGCTGCAGACA	RNA expression	qPCR
dc_h_chip_6	Pcdha4 s-cRNA reverse	human	CCAGGGAAATTGACTCTTAG	RNA expression	qPCR
DC_h_19	Pcdha4 spliced forward	human	CAGAGAAGATCAGCTGCAGACA	RNA expression	qPCR
DC_h_24	Pcdha4 spliced reverse	human	GCTCTCAGGGAGGCAGAGTAA	RNA expression	qPCR
DC_h_551	Pcdha12 as-lncRNA forward	human	ATTGGAATGTGGGTGCGGAGA	RNA expression	qPCR
DC_h_552	Pcdha12 as-lncRNA reverse	human	CCACCTAACAGCGACCTCATG	RNA expression	qPCR
DC_h_21	Pcdha12 s-cRNA forward	human	GCCCAGCCTTCAGCTGTC	RNA expression	qPCR
DC_h_chip_18	Pcdha12 s-cRNA reverse	human	GAGAATGTAGTTATAACCTAACCG	RNA expression	qPCR
DC_h_21	Pcdha12 spliced forward	human	GCCCAGCCTTCAGCTGTC	RNA expression	qPCR
DC_h_24	Pcdha12 spliced reverse	human	GCTCTCAGGGAGGCAGAGTAA	RNA expression	qPCR
DC_h_chip_24	Pcdha4 pCBS forward	human	TACTTACGGTTGGAGGCCACAT	ChIP and MeDIP	qPCR
DC_h_chip_39	Pcdha4 pCBS reverse	human	GGAATTTCCTCTCTCCTCCT	chromatin IP and DIP	qPCR
DC_h_chip_105	Pcdha4 pCBS/eCBS middle forward	human	GGCGTCTGCTGCTTACTTC	chromatin IP and DIP	qPCR
DC_h_chip_106	Pcdha4 pCBS/eCBS middle reverse	human	CGAGTAGTGGAGCTGACCGT	chromatin IP and DIP	qPCR
DC_h_chip_107	Pcdha4 eCBS forward	human	GAACCTGTCATCGCGGAATC	chromatin IP and DIP	qPCR
DC_h_chip_108	Pcdha4 eCBS reverse	human	AAGTATTCTATTGGGCTCAGTCTG	chromatin IP and DIP	qPCR
DC_h_chip_26	Pcdha6 pCBS forward	human	GATGTCGCTGCTTACCATGAGT	chromatin IP	qPCR
DC_h_chip_41	Pcdha6 pCBS reverse	human	CAGTCAGGGATGATGAGCTAA	chromatin IP	qPCR
DC_h_chip_123	Pcdha6 eCBS forward	human	CGCCCTTGTCCCGGTAGAG	chromatin IP	qPCR
DC_h_chip_124	Pcdha6 eCBS reverse	human	CTAGCCCGAAGTATCGCTAG	chromatin IP	qPCR
DC_h_chip_29	Pcdha9 pCBS forward	human	ACTTTGGGCCACGTGATGTC	chromatin IP	qPCR
DC_h_chip_44	Pcdha9 pCBS reverse	human	ATGGGAAAAGGGCTGTATTGT	chromatin IP	qPCR
DC_h_chip_125	Pcdha9 eCBS forward	human	CATTAACGACAACCCCTCCAGTG	chromatin IP	qPCR
DC_h_chip_126	Pcdha9 eCBS reverse	human	CACGTCCAGGAAGAAATCTCA	chromatin IP	qPCR
DC_h_chip_127	Pcdha12 pCBS forward	human	GACCCAGGAAGTGGCTAAACC	chromatin IP and DIP	qPCR
DC_h_chip_130	Pcdha12 pCBS forward	human	GTGAATGATTGGATGTGGG	chromatin IP and DIP	qPCR
DC_h_chip_113	Pcdha12 pCBS/eCBS middle forward	human	CGTCTGCTGCTCGCTTC	chromatin IP and DIP	qPCR
DC_h_chip_114	Pcdha12 pCBS/eCBS middle forward	human	CGTGTGGCTCGCTCGTAG	chromatin IP and DIP	qPCR
DC_h_chip_115	Pcdha12 eCBS forward	human	CGCCGGTGTTCAGAGAAAGG	chromatin IP and DIP	qPCR
DC_h_chip_116	Pcdha12 eCBS forward	human	GCATCAGAAGCGCCCTCTAG	chromatin IP and DIP	qPCR
DC_h_chip_77	HS5-1 L-CBS forward	human	GGGAGTGTCTGAGGGCTGAA	chromatin IP	qPCR
DC_h_chip_78	HS5-1 L-CBS reverse	human	TTCCGTACCATATGGATTGCTT	chromatin IP	qPCR
DC_h_chip_79	HS5-1 L-CBS/R-CBS middle forward	human	CAAATGTAGTCCGTCCCAGTG	chromatin IP	qPCR
DC_h_chip_80	HS5-1 L-CBS/R-CBS middle reverse	human	GTACAAAAGTCAGTGTGCGTTATG	chromatin IP	qPCR
DC_h_chip_119	HS5-1 R-CBS forward	human	GGCCATTTCCTTGTGTTGGA	chromatin IP	qPCR
DC_h_chip_120	HS5-1 R-CBS reverse	human	GCCCCTACCGGAAGCTGTCTAT	chromatin IP	qPCR

Supplemental Table 2, Related to Figures 3, 4 and 5: Table of the guide RNAs (gRNAs) used in this study				
ID	Name	Organism	Sequence	Assay
a4_pCBS_1	gRNA for a4 sense promoter	human	AGTTTACAGTAGAGTGTG	dCas9-VPR activation
a4_pCBS_2	gRNA for a4 sense promoter	human	AACCATAATACACTCTT	dCas9-VPR activation
a4_pCBS_3	gRNA for a4 sense promoter	human	CACAAAATACATGAGAGA	dCas9-VPR activation
a4_pCBS_4	gRNA for a4 sense promoter	human	CCACACTCAATCAATCAG	dCas9-VPR activation
a4_eCBS_1	gRNA for a4 antisense promoter	human	CGGCCTGGATTCCGCGA	dCas9-VPR activation
a4_eCBS_2	gRNA for a4 antisense promoter	human	CAGAGAAAAGTATTCTATT	dCas9-VPR activation
a4_eCBS_3	gRNA for a4 antisense promoter	human	AACGGTGCCAGTCACACT	dCas9-VPR activation
a4_eCBS_4	gRNA for a4 antisense promoter	human	ATCCGAGGCGCCCTCTAG	dCas9-VPR activation
a6_pCBS_1	gRNA for a6 sense promoter	human	CGCCATCATTCAACAGTC	dCas9-VPR activation
a6_pCBS_2	gRNA for a6 sense promoter	human	ACATCATGCGGCTCCAAA	dCas9-VPR activation
a6_pCBS_3	gRNA for a6 sense promoter	human	GTGCAAATTACAAACGTG	dCas9-VPR activation
a6_pCBS_4	gRNA for a6 sense promoter	human	TAAACTATTCTACACTCT	dCas9-VPR activation
a6_eCBS_1	gRNA for a6 antisense promoter	human	AGGAATAAGTTGTGTGC	dCas9-VPR activation
a6_eCBS_2	gRNA for a6 antisense promoter	human	GAGTTTATAGGTTAAGA	dCas9-VPR activation
a6_eCBS_3	gRNA for a6 antisense promoter	human	TGAGCCAACATCTGCAT	dCas9-VPR activation
a6_eCBS_4	gRNA for a6 antisense promoter	human	TCTACCGGGAACAAAGGG	dCas9-VPR activation
a9_pCBS_1	gRNA for a9 sense promoter	human	GTCATACAAAATTTTAG	dCas9-VPR activation
a9_pCBS_2	gRNA for a9 sense promoter	human	GCAGTCAGTCTGCTAAGA	dCas9-VPR activation
a9_eCBS_1	gRNA for a9 antisense promoter	human	GATTCTTTGTGTCGCT	dCas9-VPR activation
a9_eCBS_2	gRNA for a9 antisense promoter	human	GAGCAATAATGAAGCTC	dCas9-VPR activation
a12_pCBS_1	gRNA for a12 sense promoter	human	ATGATAAAAGTGTAGGTTC	dCas9-VPR activation
a12_pCBS_2	gRNA for a12 sense promoter	human	AGAACCTACACTTTATCA	dCas9-VPR activation
a12_pCBS_3	gRNA for a12 sense promoter	human	ACGATGGAGTGCTTGTGA	dCas9-VPR activation
a12_pCBS_4	gRNA for a12 sense promoter	human	CGGATCATTTATAAATGC	dCas9-VPR activation
a12_eCBS_1	gRNA for a12 antisense promoter	human	CATTTAGACTTAACGCAT	dCas9-VPR activation
a12_eCBS_2	gRNA for a12 antisense promoter	human	AGGCCAGATTCAAGAAC	dCas9-VPR activation
a12_eCBS_3	gRNA for a12 antisense promoter	human	ATCAGAAGCGCCCTCTAG	dCas9-VPR activation
a12_eCBS_4	gRNA for a12 antisense promoter	human	CAGCAATAATTGAGTTT	dCas9-VPR activation
adel_1	gRNA used to generate SK-N-SH- $\alpha$ het	human	CTCGGATCTAGAGGATAG	Genome editing
adel_2	gRNA used to generate SK-N-SH- $\alpha$ het	human	GTGGTAAGATTGTTGCT	Genome editing