

Table SI. Specific sequences of primers used in mRNA detection.

Gene name	Primer sequence (5'-3')
GAPDH	F: GAAGGTCGGAGTCAACGGATT
	R: CCTGGAAGATGGTGATGGGATT
ADCY5	F: CACTCGCAGCGGGAGAACCA
	R: TCCATGGCAACATGACGGGGA
NRG1	F: AGTCCTTCGGTGTGAAACCAGTTCT
	R: TGCGAAGTTCTGACTTCCCTGGC
KIF5A	F: TGTCATTGTGGGCAACGGGGA
	R: GTCGGGCCACAGTGAACCTCT
MED12L	F: TGGAGACCTCTTCAGTAGTGCCTG
	R: TGAAGTCTGGATCCCATCGCAAGT
ELAVL4	F: CAGGAGTCTCTTCGGGAGCATTGG
	R: GATGGCTTTCTCTGCATCCTTTGGA

ADCY5, adenylate cyclase 5; NRG1, neuregulin 1; KIF5A, kinesin family member 5A; MED12L, mediator complex subunit 12L; ELAVL4, ELAV-like RNA-binding protein 4; F, forward; R, reverse.

Table SII. Specific sequences of primers used in the detection of DNA methylation expression levels.

Gene name	Primer sequence (5'-3')
ADCY5_1	F: GGGGGTTTYGGTTTTAGTTTT
	R: CTCCAAACCCACCTCCAC
ADCY5_2	F: AGGGATTGGTTTGGTTGTTG
	R: ACCCCRAAAACAATAAACTCC
ADCY5_3	F: GGGTYGGTYGGGATTTGT
	R: ACCCCTCTAAACCRACACTTCTAAAC
ADCY5_4	F: AGGTTTATGTGGTTTTGGTGGA
	R: CAAAACAACCTCACCATACTCATAAC
ELAVL4_5	F: GGGAAGATGYGTTTTAAGAATTAGG
	R: CTCTCCCCCTCCCTAAAAATC
ELAVL4_6	F: GGGGTGTAATAGAGGAAAGATAGG
	R: ACAAACRACCCCRCAACAAC
KIF5A_7_2	F: GTGAGTTGGGTGGGGAAG
	R: AAACRTCTAATCCTTTCRAACTCTCTACCTCTC
MED12L_10	F: GGGGAGAGAGGGAGTTTGTTT
	R: AACTTAACCCCRATCAATACTACAAAA
MED12L_8	F: GTTAGGTGGTTTAGTATTTGGTGTT
	R: CCCTCTAAAACCTACTCCAAAC
MED12L_9	F: GATTGTAAAGGGTTAAGTYGGTTTT
	R: CRAACCAATACAAACAAAAACAATC
NRG1_11	F: GGGGYGTTGGTTTYGGTTTT
	R: CCCTCTTCCCCACCACAC
NRG1_12	F: AGTGGGATTTGGGTATAGGAG
	R: CCACTTCTACRCTACCAAACACACC
NRG1_13	F: AGGTTTTTGTTTATTGAAGYGTTATTTT
	R: CCAACCTATTTACCTATAATACCAACTC
NRG1_14	F: GAGGAGGAGGAGTGTTGTTG
	R: CCAACAACAACAATAATAACAACAAC
NRG1_15	F: AGAAGGAGGTTAGTYGGGTGTTG
	R: CTAAAACCAACAATAAAACCCAAAAAC

ADCY5, adenylate cyclase 5; NRG1, neuregulin 1; KIF5A, kinesin family member 5A; MED12L, mediator complex subunit 12L; ELAVL4, ELAV-like RNA-binding protein 4; F, forward; R, reverse.