

Table S1. Description of the primers

Primer version 1	Primer version 2
Forward Primer for Methylated DNA (MF)	
5' AGCGAGAGTAGTTTTTTTCGC 3'	5' TGTATGGCGGAGGTAATATTC 3'
Reverse Primer for Methylated DNA (MR)	
5' CATATAACAACGCACGTCAAA 3'	5' AAACACTCTCTCGCTACCGCT 3'
Forward Primer for Unmethylated DNA (UF)	
5' GGTAGTGAGAGTAGTTTTTTTGT 3'	5' ATTGTATGGTGGAGGTAATATTT 3'
Reverse Primer for Unmethylated DNA (UR)	
5' TCATATAACAACACACATCAAAAC 3'	5' AAAAACTACTCTCACTACCACT 3'
Promoter sequence region	
>ref NC_000011.9 :27723083-27723477 Homo sapiens chromosome 11, GRCh37.p13 Primary Assembly	>ref NC_000011.9 :27722850-27723394 Homo sapiens chromosome 11, GRCh37.p13 Primary Assembly
gDNA Sequence	
5' TCCATTTGATCTCGGCAGAGGCAGGGAGATTTC ATGCTAGTTCGCCGGGGGAGCGGCAGCGAGA GCAGCCCTCTCCGCGGTGAATGGGAAAGTGGGT GGGAGTCCACGAGAGGGCTCCACGGTGCCTTG ACGTGCGCTGTGCATATGATACCTCCGCTGCCTC GAAATAGACACTCTAGTGCACGAATTACCAGA ATCAAAATTCAGCGCATTTAAAATGATACATCT TTTATTAGAAGAGTTCGGTCCAGGGCATTGCA GCTTTTGAGATGTTTTCACTCCAGCCCCAGCA AACACACGTATAAGCTAACCCCTTTAATAACGA ACCAGGGCAGCCAAGATAAATAAAAAGTCTTC TGCTTTAACCAGAGTGGGGGTAGGTGATTCGAG G 3'	5' AGTCACTACTTGTCAAAGTAACCATCAAGGCAGC TGCTCCGGGAAAGACTTCGGCCCCAAAACCTCCA CACTCTATTATTTTTTACGTTCCCTTCGCTTAATT AAAGGGGGGAGGGGGCGCGAGTCTTTGGTGCCC GGTATGTACTCCTTCTGTTCTGCAGCAAAGAAGTT AAATTATTGATAGTGGAAATTGCATGGCGGAGGT AATACTCGCACCCCATCAGCGAGAAGCTCCATTT GATCTCGGCAGAGGCAGGGAGATTTTCATGCTAGT TCGCCGGGGGAGCGGCAGCGAGAGCAGCCCTC TCCGCGGTGAATGGGAAAGTGGGTGGGAGTCCA CGAGAGGGCTCCACGGTGCCTTGACGTGCGCTGT CATATGATACCTCCGCTGCCTCGAAATAGACACT CTAGTGCACGAATTACCAGAATCAAAATTCAGCG CATTTAAAATGATACATCTTTTATTAGAAGAGTTC CGTTCCAGGGCATTGCATGCTTTTGCAGATGTTTT CACTTCCAGCCCCAGCAAACACACGTATAAGCT 3'
Bisulfite modification of DNA	
5' TTTATTGATTTCGGTAGAGGTAGGGAGATTTT ATGTTAGTTCGTCGGGGGAGCGGTAGCGAGAG TAGTTTTTTTCGCGGTGAATGGGAAAGTGGGTG GGAGTTTACGAGAGGGTTTTACGGTGTTTTGAC GTGCGTTGTTATATGATATTTTCGTTGTTTCGAA ATAGATATTTTAGTGTACGAATTATTAGAATTAA AATTTAGCGTATTTAAAATGATATATTTTTTATT AGAAGAGTTTCGTTTTAGGGTATTGTATGTTTTT GTAGATGTTTTATTTTTAGTTTTAGTAAATATAC GTATAAGTTAATTTTTTAATAACGAATTAGGGT AGTTAAGATAAATAAAAAGTTTTTTGTTTTAATT AGAGTGGGGGTAGGTGATTCGAGG 3'	5' AGTTATTATTTGTTAAAGTAATTATTAAGGTAGTT GTTTCGGGAAAGATTTTCGGTTTTTAAAATTTTATA TTTTATTATTTTTTACGTTTTTTTCGTTTAAATAAA GGGGGGAGGGGGCGCGAGTTTTTGGTGTTCCGGTA TGTATTTTTTTGTTTTGTAGTAAAGAAGTTAAATT ATTGATAGTGGAATTTGTATGGCGGAGGTAATAT TCGTATTTTATTAGCGAGAAGTTTTATTGATTTCG GTAGAGGTAGGGAGATTTTATGTTAGTTCGTCGG GGGGAGCGGTAGCGAGAGTAGTTTTTTTCGCGGT GAATGGGAAAGTGGGTGGGAGTTTACGAGAGGG TTTTACGGTGTTTTGACGTGCGTTGTTATATGATAT TTTCGTTGTTTCGAAATAGATATTTTATGTGACGA ATTATTAGAATTAATAATTTAGCGTATTTAAAATGA TATATTTTTTATTAGAAGAGTTTCGTTTTAGGGTAT TGTATGTTTTTGTAGATGTTTTTATTTTTAGTTTTAG TAAATATACGTATAAGTT 3'

The primers were designed with Methyl Primer Express™ Software v1.0 (Applied Biosystems, USA)