**Supplementary Materials:**

**Table S1** Promoter region sequences and CpG islands of representative genes for bisulfite DNA analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene** | **CpG island Sequences** | **Product length** | **CpGs** |
| RUNX1 | tttcccaggctttaaaatacctgtgagttgccagcccgttgtaggggtcagactctcaccaaaacatttctttttatttatttttcccttttatagtttcacttatgccatgatagacgttaccaaggacttaactctcccggagctgatgcctagcattttaaatgatgggatccacatcctgtcggagcagcggcttgatgccagcgttgaattactattgaataagcagcaatgaaatctttatcaaaataatcagtagttccaaaaaccacaaataacaacaggagccgagttgtactaaatcagcaaagaccattgagatataataagtgactgagtcacttttttctacatccccccctcttgcaaagtctactcggctattttcttgcacagcctgggggagggcaggt | 416 bp | 8 |
| IQGAP3 | cagaaaaggagcctggaaggaacaagacgaggaactgctgtaaggggagcggtactgccccggcctggggcgcctcttctcccagcacctgggcggcccggctccgcggccgggaactacaaatcccaggattctcagcggtgtggacgggaagtgtcctgtctggcggtgccgacggtgaggggcggtggcccaacggcgggagattcaaacctggaagaaggaggaacatggagaggagagcagcgggcccaggctgggcagcctgtgagtg | 274 bp | 18 |
| DNMT3B | ccaaagcaggatgacaggcaggggcaccgcggcgccccggtggcactgcggctggaggtgggggttaaagcggagactctggtgctgtgtgactacagtgggggccctgccctctctgagcccccgcctccaggcctgtgtgtgtgtctccgttcgggttgaaaggagcccgggaaaaaggccccagaaggagtctggttttggacgtctgaccccacccctcccgcttagggcttctgatcccccaggg | 250 bp | 12 |



**Fig. S1** Standard curves of dG and m5dC for determination of genomic DNA methylation using UPLC-MS.