**Table S3: Primer sequences for bisulphite PCR of retrotransposons and DMRs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Target** | **Primer** | **Primer Sequence (5' --- 3')a** | **Length** |
| BDDF | BDDF-F | ataactaaataacatcactcac | 102 bp |
| BDDF-R | CTTGCTTATATGCATGGGGC |
| BovB | BovB-F | tttaaggtaaggagtagtggttg | 112 bp |
| BovB-R | ctaataccctcttacaacacctac |
| L1Bt | L1Bt-F | tagattagttttatggattttgtgg | 145 bp |
| L1Bt-R | atacaccaatcccaaacatcc |
| BCS | BtBC-F | CATCTGGTTCTTTCTTCAGGGCC | 117 bp |
| BtBC-R | CAAGCATCCCCCAAAATAAA |
| NESP55 (proximal) | NESP55-1-F | TTTTTTGGTTTTGTAGAGAGTAGTTT | 137 bp |
| NESP55-1-R | AATAAATACTTCCCTTTTTCCCCTC |
| NESP55 (distal) | NESP55-2-F | TTGGGTTAAAGAATATAAGGAGAATT | 73 bp |
| NESP55-2-R | AAAAAAAACAATCCCCATCC |
| PEG3 | PEG3-F | GtAGttTGTGtAAGtTtTAGTGttttt | 76 bp |
| PEG3-R | AACATATCCACCCTTAACTACTAAC |

a Based on Oct 2007 bovine genome assembly bosTau4