

**Supplemental Table 1****PCR primers used for methylation sensitive PCR analysis (MS-PCR), RT-PCR,****bisulphite sequencing analysis and ChIPs analysis.**

ERVL MS-PCR	5'-AAACAAGCTCTCAATGCCGTA-3' 5'-AGGGCTCTGAAAGGACAGGT-3'
5'MaLR MS-PCR	5'-TAACCCAAGACACCGTGGAT-3' 5'-CTCTGAGGATCTGCCCTGAC-3'
3'MaLR MS-PCR	5'-GTCCGTCTGTCCGTCTGTCT-3' 5'-TGCGTAGCCTTTGTGAGTGT-3'
PU.1 RT-PCR	5'-ATGGAAGGGTTTTCCCTCAC-3' 5'-AAGCCATCAGCTTCTCCATC-3'
ERVL RT-PCR	5'-CCAACACGATGCTCACAGTT-3' 5'-AAGCCTGCCAGGTAGTGGT-3'
MaLR RT-PCR	5'-GGTCAGGAGAGGTTTTGAAG-3' 5'-CATAGACAGACGGACAGACG-3'
IAP RT-PCR	5'-GAAGCGGTGAATCCTCC-3' 5'-TCCTTCAAAGACCGGAAATGC-3'
Actin RT-PCR	5'-GGCCCAGAGCAAGAGAGGTAT-3' 5'-ACGCACGATTTCCCTCTCAGC-3'
PU.1 promoter bisulphite	5'-TTATTAGAGGGGATTGAGAAGA AAT- 3' and 5'-ACATCCAATAAAA CTCCAAATTAATC-3'
ERVL/MaLR bisulphite	5'GGTGATATTTGTAGTAAGTTTGTGGTAT AT-3' and 5'-AATCATAAAACAATAAAA AAATACTTTCA-3'
PU.1 promoter ChIPs	5'-GATCCACGCTCTCGCTATTC-3' 5'-GCCAGCACAAGTTCCTGATT-3'
ERVL ChIPs	5'-GTGTGTGCCACCACTACCTG-3' 5'-ACAACCTCCACACAGCACAGC-3'
MaLR ChIPs	5'-AGGGCAGATCCTCAGAGCTT-3' 5'-GAGTGTGTGCACATGCAGAAG-3'
Actin ChIPs	5'-CTCAAACAAGAGGCCACACA-3' 5'-ATGAAGAGTTTTGGCGATGG-3'
Major satellite ChIPs	5'-GCGAGAAAACCTGAAAATCACG-3' 5'-CTTGCCATATTCACGTCCT-3'