

**Table S6: Variation in putative transcription factor binding sites in KoRV LTRs**

Family	Samples								
	AF151794.2	AB721500.1	Pci-SN265	Pci-QMJ648l	Pci-582119	Pci-MCZ12454	Pci-MCZ8574	Pci-um3435	Pci-maex1738
Core promoter initiator elements	1	1	1	1	1	1	1	1	1
Vertebrate TATA binding protein factor	1	1	1	1	1	1	1	1	1
Abdominal-B type homeodomain transcription factors	3	3	3	3	3	3	3	3	3
MAF and AP1 related factors	1	1	1	1	1	1	1	1	1
Bicoid-like homeodomain transcription factors	1	1	1	1	1	1	1	1	1
POZ domain zinc finger expressed in B-Cells	3	3	3	3	3	3	3	3	3
Brn-5 POU domain factors	2	2	2	2	2	2	2	2	2
CCAAT binding factors	1	2	1	2	1	1	2	1	1
Calcium-response elements	1	1	1	1	1	1	1	1	1
Cell cycle regulators	1	1	1	1	1	1	1	1	1
Vertebrate caudal related homeodomain protein	2	2	2	2	2	2	2	2	2
Ccaat/Enhancer Binding Protein	2	2	2	3	2	2	2	2	2
Cell cycle regulators: Cell cycle homology element	1	1	1	1	1	1	1	1	1
CLOX and CLOX homology (CDP) factors	1	1	1	1	1	1	1	1	1
CP2-erythrocyte Factor related to drosophila Elf1	0	0	1	0	0	0	1	0	0
CTCF and BORIS gene family	1	1	1	1	1	1	1	1	1
Cyclin D binding myb-like transcription factor	1	1	1	1	1	1	1	1	1
E2F-myc activator/cell cycle regulator	4	4	4	4	4	4	4	4	4
E-box binding factors	2	2	2	2	2	2	2	2	2
Estrogen response elements	2	2	2	2	2	2	2	2	2
Human and murine ETS1 factors	6	5	5	5	5	5	5	5	5
EV11-myeoid transforming protein	0	0	0	1	0	0	0	0	1
FAST-1 SMAD interacting proteins	1	1	1	1	1	1	1	1	1
Fork head domain factors	4	5	4	5	4	4	5	4	4
Farnesoid X - activated receptor response elements	1	1	1	1	1	1	1	1	1
Growth factor independence transcriptional repressor	1	1	1	1	1	1	1	1	1
Glucocorticoid responsive and related element	1	1	2	2	1	1	1	1	1
Human acute myelogenous leukemia factors	1	1	1	1	1	1	1	1	1
Twist subfamily of class B bHLH transcription factors	3	2	2	2	2	2	3	2	2
Heat shock factors	5	5	5	5	5	5	5	5	5
Vertebrate homologues of enhancer of split complex	3	3	3	3	3	3	3	3	3
Kruppel-like C2H2 zinc finger factors hypermethylated in cancer	1	1	1	1	1	1	1	1	1
Human muscle-specific Mt binding site	1	1	1	1	1	1	1	1	1
Onecut homeodomain factor HNF6	1	1	1	1	1	1	1	1	1
HOX - PBX complexes	2	2	2	2	2	2	2	2	2
HOX - MEIS1 heterodimers	0	0	0	0	0	0	0	0	1
Ikaros zinc finger family	1	1	1	1	1	1	1	1	1
Interferon regulatory factors	1	1	1	1	1	1	1	1	1
Kruppel like transcription factors	2	2	2	2	2	2	2	2	2
LEF1/TCF	2	2	2	2	2	2	2	2	2
Myc associated zinc fingers	1	1	1	1	1	1	1	1	1
MEF3 binding sites	1	1	1	1	1	1	1	1	1
Myc-interacting Zn finger protein 1	1	1	1	1	1	1	1	1	1
Cellular and viral myb-like transcriptional regulators	3	2	3	2	2	3	2	2	2
Myoblast determining factors	1	1	1	1	1	1	1	1	1
MYT1 C2HC zinc finger protein	0	0	0	0	0	0	0	0	1
Myeloid zinc finger 1 factors	1	1	1	1	1	1	1	1	1
NGFI-B response elements, nur subfamily of nuclear receptors	1	1	1	1	1	1	1	1	1
Nuclear factor 1	0	1	1	1	1	1	1	1	1
Nuclear factor of activated T-cells	1	1	1	1	1	1	1	1	1
Nuclear factor kappa B/c-rel	1	1	1	1	1	1	1	1	1
Octamer binding protein	5	5	5	6	5	5	5	5	1
Odd-skipped related factors	0	1	1	1	1	1	1	1	1
OVO homolog-like transcription factors	1	1	1	1	1	1	1	1	5
PAR/bZIP family	3	3	3	4	3	3	3	3	3
PAX-4/PAX-6 paired domain binding sites	1	1	1	1	1	1	1	1	3
Peroxisome proliferator-activated receptor	1	1	1	1	1	1	1	1	1
Pleomorphic adenoma gene	3	3	3	3	3	3	3	3	1
v-ERB and RAR-related orphan receptor alpha	1	1	1	1	1	1	1	1	2
SWI/SNF related nucleophosphoproteins with a RING finger DNA binding motif	1	1	1	1	1	1	1	1	3
RXR heterodimer binding sites	2	2	2	2	2	2	2	2	2
Spalt-like transcription factor 2	1	1	1	1	1	1	1	1	1
Vertebrate steroidogenic factor	1	1	1	1	1	1	1	1	3
Sine oculis (SIX) homeodomain factors	1	1	1	1	1	1	1	1	1
Vertebrate SMAD family of transcription factors	0	0	1	0	0	0	1	0	1
SOX/SRY-sex/testis determining and related HMG box factors	2	2	2	2	2	2	2	2	2
GC-Box factors SP1/GC	1	1	1	1	1	1	1	1	1
Testis-specific bHLH-Zip transcription factors	1	1	1	1	1	1	1	1	2
Signal transducer and activator of transcription	2	2	2	2	2	2	2	2	1
Motif composed of binding sites for pluripotency or stem cell factors	3	3	4	3	3	3	3	3	1
TEA/ATTS DNA binding domain factors	1	1	1	1	1	1	1	1	2
X-box binding factors	1	1	1	1	1	1	1	1	3
Y-box binding transcription factors,	1	1	1	1	1	1	1	1	1
C2H2 zinc finger transcription factors 2	1	1	1	1	1	1	1	1	1
C2H2 zinc finger transcription factors 3	0	0	1	0	0	1	0	0	0
C2H2 zinc finger transcription factors 10	1	1	1	1	1	1	1	1	1
ZF5 POZ domain zinc finger	0	1	1	1	0	1	0	0	1
Two-handed zinc finger homeodomain transcription factors	2	2	2	2	2	2	2	2	2
Retroviral CCAAT binding factors	2	2	2	2	2	2	2	2	2
Retroviral PolyA Downstream signal	1	1	1	1	1	1	1	1	1
Retroviral PolyA signal	1	1	1	1	1	1	1	1	1
Retroviral upstream element	2	2	2	2	2	2	2	2	2

Grey shading indicates sequences with differing numbers of predicted TFs for a given domain