

**Table SI: Specific primer used for multiplex amplification and simplex real time PCR.**

GENE	Forward primer	Reverse primer
CCR7	CAGCCTTCCTGTGTGGTTTT	TCCGTGACCTCATCTTGACA
CCR9	CACCCACAGACTTCACAAGC	CTCGCAAACCTGCCTGACAT
CD3 $\epsilon$	GGCCTCTGCCTCTTATCAGTT	CCAGGATACTGAGGGCATGT
CD4	GCCTCCTGCTTTTTCAATTGG	CTGAAACCGGTGAGGACACT
CD8B	AAAGGGACTATCCACGGTGA	CCGACGATCATGCAGAAGTA
CD38	ACCTCACATGGTGTGGTGAA	ACCACATCACAGGCAGCTT
CD44	CGGACACCATGGACAAGTTT	CACGTGGAATACACCTGCAA
CKIT	CATTCCCCAAACCTGAACAC	CCTCCTTCGGTGCCTTTTA
CMYB	GACTATGATGGGCTGCTTCC	GCACTGCACATCTGTTCGAT
CXCR4	CAGCAGGTAGCAAAGTGACG	ATAGTCCCCTGAGCCCATTT
EBF1	GAAGCCAACAGCGAAAAGAC	ATGAGGCGCACGTAGAAATC
GATA1	AGAAGCGCCTGATTGTCAGT	CGGTTACCTGGTGTAGCTT
GATA3	GTCCTGTGCGAACTGTCAGA	CTGGATGCCTTCCTTCTTCA
HES1	CCAAGACAGCATCTGAGCA	CCGCGAGCTATCTTTCTTCA
IKAROS	CCAATGTGCTCATGGTTCAC	GGAATGCAGCTTGATGTGC
IL7R $\alpha$	TATCGTATGGCCCAGTCTCC	GAATCTGGCAGTCCAGGAAA
ITG $\alpha$ 4	AACACGCTGTTCGGCTACTC	CTTTCCGATCCTGCATCTGT
LMO2	CGGCGCCTCTACTACAAACT	GTCTTTACCCCGCATTGTC
NOTCH1	CAACGCCTACCTCTGCTTCT	ACTCGTAGCCATCGATCTTGTC
PSGL1	GGCTGGGACCTTGTCATAA	CCAGTAGGATCAGCAACAGGA
RAG1	CAGTCCATGGTCTGTGGAT	CGAGTCAACATCTGCCTTCA
RORC	CAGCGCTCCAACATCTTCT	CGAACTCCACCACGTACTION
RPL27	CCCTTGACAAAACGTGTCGT	ACCGCAGTTTCTGGAAGAAC