

1. β -globin locus

Note: all primers were designed to the single (S) allele of the β -globin locus, and all coordinates given represent positions in kb with respect to the transcription start site of the $\epsilon\gamma$ -globin gene. Thus, in the sequence 5' – ACATACTTGCTTCTGACACTCCTGT – 3', the first A represents position +1.

Primer Location	Forward Primer	Reverse Primer
Mus β -2.42	GGATTCCACCTTGCTGTCATTAGT	AGAAATGGTCACTACTCTGCTTCC
Mus β -1.22	GGTTAGGAGCACAGAAGCCATAG	TTGTCTCCAACCTGCCTCTG
Mus β $\epsilon\gamma$ Pr	CCAGACTTGCCATCATGGTGA	TCACCACCAACCTCTTCAACAT
Mus β +1.31	GGCTAGTCACTTCGCAATGAATT	GGCATAGCGGACACACAGGAT
Mus β +2.43	CAGACATTTGGTGTCTCGGTATGT	TGGTAGTGCTCCAGTCTCAGGA
Mus β +3.32	GCCACTGTGCTGGTCTCTGAA	GTCTTCTGTCTCGCTCCCTTAC
Mus β +5.14	CGACCACTGTGCTTTTCTGTGC	TGCCACCTGTCTGGAGAAG
Mus β +6.34	CTCGTTTTCTCTGGACCTGTCA	CCCACCACTGCATAATTGCC
Mus β +7.65	TGAAGAGCAACTTAGGGTACTGG	GGAGGATAGTTGGTAGTCTGAGT
Mus β +9.19	CATGTTCTTTACAGCCACGCAAAT	AGGACGCTAGGACTGGATTATACA
Mus β β h1Pr+10.10	GGACAGGTCTTCAGCCTCTTGA	CAGATGCTTGTGATAGCTGCCT
Mus β +11.47	TGGCAGAAGCTGGTGATTGGA	TGGACTCAAAGAGGGCATCATAGA
Mus β +15.11	AGGCTCAAGGCTGGCTACTG	AGGAAGAATCATGGCAATGCCTTC
Mus β +16.50	CCTGTTTCAGAATACTGACTTGGT	GGATTCATAAGAGTAGGACATGGC
Mus β +18.13	GGTGATGACTTTAATTTCTCGCA	CCTGGTAGGATACCTTGATGTCCA
Mus β +20.71	CAGGGAGATATGTCCACCTTTG	TCCTACTTAGAGGCTCTCTGAGAC
Mus β +23.65	TGCTCCATCTCACCTTCTCTTG	GGCAGTGCAGTCTCCTTGACA
Mus β β 1Pr+25.27	CACCGAAGCCTGATCCGTAGA	GAAGCAAATGTGAGGAGCAACTGA
Mus β +26.57	GAAGGTGGTGGCTGGAGTGG	TGTTACAGGCAAGAGCAGGAA
Mus β +28.49	CAGCAGCCAGATCATGCAATGT	TCACGATGAGACAGTCAGCAGTAA
Mus β +37.48	ACAGAGACCCACAGCCAAACA	ACTCCTACAATCTTCTCTCGTCT
Mus β +38.25	ACAAATGGGAATAGGTGGGGACTA	TCGCTCATTCTGCTGCTTCT
Mus β β 2Pr+39.19	TGTTGTGTCATCTGGAAGCCTCAC	CTGCCACTCTGTCTCTCTGA
Mus β +40.69	ATGAAGACCTTTGGGCATCTAGC	CTCACTTCTTCCCTCCAGCAT
Mus β +44.10	CAGTCTCAATGTGGTGATGTGTT	CCCTTATTCTGTGTGGCTGGTATT

2. α -Globin Locus

Coordinates given represent positions in kb with respect to the transcription start site of the α -globin gene. Thus, in the sequence 5' – x – 3', the first A represents position +1. For the the α Pr+7/+19 and +8/+20.9 primer sets have two coordinates because of the presence of duplicated α -globin genes within the locus, which are virtually identical in sequence and cannot be distinguished by PCR.

Primer Location	Forward Primer	Reverse Primer
Mus α ζ Pr	TGGATTCTGTGTGGGACTAAGGC	GGGCTTGGTGGGACTGTAAGG
Mus α +1.4	CTGTCTGCTGGTCACAATGGC	AGCGTACTTCTCAGTCAGGATAG
Mus α α Pr+7/+19	GCACAACCCAGCCCCAGAAT	ACACGCCCTTGGAGCAGTTC
Mus α +8/+20.9	GGGCAGTAAAGACAAGGTTTCAGAG	GGAGGGCTTGGGAGGGACT

3. Other loci

Locus	Forward Primer	Reverse Primer
Protamine	ACCAGACCATCATCACCACCAAGA	GTGCCAGGAGATCAGGAGTTCT
Amylase	TCGTTCTGCTGCTTTCCCTCAT	CGCTCACATTCTTGGCAATATCA
T-Cell Receptor β #1	TCTTCCCAAGTTGCCACCCTACA	GGACTGCTGTGTTACGGTTCA
T-Cell Receptor β #2	CCTCAAGTCGCTTCCAACCTCAA	CCAGGCTCAGGTAGACCAGTTACA