

CR1 Wild-type
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGACTCAAAGTGGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT WT
CR1 genome and transgene targeting deletions (19)
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGA- -CAAGTGGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -2
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGA- -AGTGGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -4
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGTA- -AGTGGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -8
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGA- -CTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -10
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTG- -ACTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -16
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGACT- -CAAGTCAAGTGTGCGACATGGCTTAGTTTT -17 x2
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTG- -ACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -23 x2
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTG- -ACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -23 x4
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAG- -TTCTAGTTTT -68
GCTCCCTAGCAG- -TTT -108 x5
CR1 genome targeting deletions (15)
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGACTG- -GTGGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -2
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGACTG- -GGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -4
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGACACGGACT- -GGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -10
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGAC- -CCAGTCAAGTGTGCGACATGGCTTAGTTTT -23
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGAC- -CCAGTCAAGTGTGCGACATGGCTTAGTTTT -23 x6
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTGAC- -CCAGTCAAGTGTGCGACATGGCTTAGTTTT -23 x2
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTG- -CATGCGCTTAGTTTT -40
GCTCCGGAGCGAAGCTCAGTTTACACCCGATCCACTGGGAGCGAGAAATATCTGTGGCTTGTG- -GGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT -84
TTGGTTTTGGGCAACATGCTGGTCACTCTCTGATAACTGCAAAAGGCTGAAGAGCTGACTGACTCTACCTGCTCAACTGGCCATCTGACCTGTTTTTCCA- -
-839
GGCTGGTGAACCCAGTCAAGTGTGCGACATGGCTTAGTTTT

CR2 Wild-type
GGGGCTGGTCTGCCGCTGCTTG-TCATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG WT
CR2N genome and transgene targeting deletions (8)
GGGGCTGGTCTGCCGCTGCT- -TGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -5
GGGGCTGGTCTGCCGCT- -GCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -17 x4
GGGGCTGGTCTGCCGCT- -ACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -20
GGG- -CATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -21
GGGGCTGGTCTGCCGCT- -GGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -24
CR2 genome and transgene targeting insertion (1)
GGGGCTGGTCTGCCGCTGCTTG-TCATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG 1
CR2 genome targeting deletions (16)
GGGGCTGGTCTGCCGCTG- -CATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -5
GGGGCTGGTCTGCCGCTGCT- -TGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -5
GGGGCTGGTCTGCCGCT- -ATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -8
GGGGCTGGTCTGCCGCTG- -TCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -10
GGGGCTGGTCTGCCGCTG- -CATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -11 x2
GGGGCTGGTCTGCCGCTG- -TCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -16
GGGGCTGGTCTGCCGCTG- -CTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -17 x2
GGGGCTGGTCTGCCGCTG- -CTTGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -20
GGGGTGGTCTGCCGCT- -ATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -21
GGGGCTGGTCTGCCGCTG- -TACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -23
GGGGCTGGTCTGCCGCTGCTTG- -AAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -30
GGGGCTGGTCTGCCGCTG- -CTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -42
GGGGCTGGTCTGCCGCTGCTTG- -CATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG -88
-426
-CTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG

CR2 genome targeting insertion (1)
GGGGCTGGTCTGCCGCTGCTTG-TCATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG 1
CR2 genome targeting deletion and insertion (2)
GGGGCTGGTCTGCCGCTGCTTG-A-CATGG-TCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG (+1)/(-1)
GGGGCTGGTCTGCCGCTGCT- -CATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTGCAAAATGAGAAGAAAGGGCACAGGGCTGTGAGGCTTATCTCCACCATCATG (+2)/(-2)

CR3 Wild-type
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC WT
CR3 genome and transgene targeting deletions (13)
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -TCGGTAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -2
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -4 x2
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGGTTG- -GGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -7
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCT- -CGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -8 x4
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGGT- -AGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -8
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -8
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGT- -CTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -19
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -25
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -TGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -23
CR3 genome and transgene targeting insertion (6)
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 1
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 1 x4
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 1
CR3 genome targeting deletions (11)
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -4 x3
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCAAGCTCA- -GTAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -4
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCT- -CGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -8
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCT- -GAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -10
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGT- -CTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -19
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAG- -CTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -17
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -TAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC -27 x2
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCT- -
-199
- - - - -ACTGCAATATTCAGGCCAAAGAAATTCCTGGAAAGTGTTCAGGAGAAAGCAATGTTGTAGGGAGCCCAAGAGAAATAAACCAATCATGATGGTGAAGATAAGCCCTCACAG
CR3 genome targeting insertion (8)
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 1 x4
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 1
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 1
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -GAGCTTGTCT- -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC 2 x2
CR3 genome targeting deletion and insertion (1)
GTCACAAGCCACAGATATTTCTGCTCCCCAGTGGATCGGGTGTAAACT- -AAGAG- - - - -GCTCGGGAGCCTCTTCTGCTGAAAAATAGAACAGCATTTGCGAAGCGCTTTGGCAATGTGC (-1)/2(-7)