

Mus musculus PRDM9 SET Domain—AA 191-376 (Dom2 allele)

Wild-Type

AAGGGCCTTGCCTATGAGGAGGTCAGCGAGCCTCAGGATGATGACTATCTCTATT
GTGAGAAGTGCCAGAATTTCTTCATCGACAGTTGTCCCAACCATGGGCCTCCTTTA
TTTGTA AAAAGACAGTATGGTGGACAGGGGGCATCCCAACCACTCAGTCCTCAGTCT
GCCCCCTGGGCTAAGAATTAGTCCATCGGGCATCCCTGAAGCTGGACTTGGAGTA
TGGAATGAAGCATCTGATCTACCAGTCGGTCTGCACTTTGGCCCCTATGAGGGTCA
GATCACAGAGGATGAAGAGGCAGCCAACAGTGGTTACTCCTGGCTGATTACCAAG
GGAAGAAACTGCTATGAGTATGTGGATGGACAGGACGAGTCCCAAGCCA ACTGGA
TGAGGTATGTGAACTGTGCCCGGGATGATGAAGAGCAGAACCTGGTAGCCTTTCA
ATATCACAGGAAAATCTTCTATCGAACCTGCCGGGTTATCAGACCAGGTTGTGAGC
TTCTGGTCTGGTATGGGGAT **GAG** TACGGCCAGGAACTGGGCATTAAGTGGGGAAG
CAAG

Protein:

KGLAYEEVSEPQDDDYLYCEKCQNFFIDSCPNHGPPLFVKDSMVD RGHPNH SVLSLP
PGLRISPSGIPEAGLG V WNEASDLPVGLHFGPYEGQITEDEEAANS GYSWLITKGRNC
YEYVDGQDESQANWMRYVNCARDDEEQNLVAFQYHRKIFYR TCRVIRPGCELLVWY
GDE **E** YGQELGIKWGSK

Prdm9^{E365K} (abbreviated as EK)

Glu 365 -> Lys; GAG -> AAG

AAGGGCCTTGCCTATGAGGAGGTCAGCGAGCCTCAGGATGATGACTATCTCTATT
GTGAGAAGTGCCAGAATTTCTTCATCGACAGTTGTCCCAACCATGGGCCTCCTTTA
TTTGTA AAAAGACAGTATGGTGGACAGGGGGCATCCCAACCACTCAGTCCTCAGTCT
GCCCCCTGGGCTAAGAATTAGTCCATCGGGCATCCCTGAAGCTGGACTTGGAGTA
TGGAATGAAGCATCTGATCTACCAGTCGGTCTGCACTTTGGCCCCTATGAGGGTCA
GATCACAGAGGATGAAGAGGCAGCCAACAGTGGTTACTCCTGGCTGATTACCAAG
GGAAGAAACTGCTATGAGTATGTGGATGGACAGGACGAGTCCCAAGCCA ACTGGA
TGAGGTATGTGAACTGTGCCCGGGATGATGAAGAGCAGAACCTGGTAGCCTTTCA
ATATCACAGGAAAATCTTCTATCGAACCTGCCGGGTTATCAGACCAGGTTGTGAGC
TTCTGGTCTGGTATGGGGAT **AAG** TACGGCCAGGAACTGGGCATTAAGTGGGGAAG
CAAG

Protein:

KGLAYEEVSEPQDDDYLYCEKCQNFFIDSCPNHGPPLFVKDSMVD RGHPNH SVLSLP
PGLRISPSGIPEAGLG V WNEASDLPVGLHFGPYEGQITEDEEAANS GYSWLITKGRNC

YEYVDGQDESQANWMRYVNCARDDEEQNLVAFQYHRKIFYRTCRVIRPGCELLVWY
GDKYGQELGIKWGSK