

Product datasheet for KN217570RB

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PTP kappa (PTPRK) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA:RFP-BSDSymbol:PTP kappa

Locus ID: 5796

Components: KN217570G1, PTP kappa gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target

Sequence: AGCAAGAGCGCCACAAAAGC

KN217570G2, PTP kappa gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target

Sequence: ACCTGCGGAGAACTGGCCTT

KN217570RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

Homologous arm and RFP-BSD sequences:

 $\verb"pUC" vector backbone" in gray; Left arm sequence in blue; RFP-BSD in green; Right arm$

 $\hbox{in violet}\\$

GGACGGAACC CCAGGACGCC TCTCCTCGGA CGGCGGGGGT TTCTCTGCGC GCGTCCTCGG TCGTCTGGTC GCACGGCTTA CCGAACTCTC GCCTCTCAAA TTCTGAGTTC TGGAACAGGG CAGCGAGCTG CGCCGGCTCC CCTTTCTCGC TCGCTCCCTC CGAGCAGCGG CTGGCGGCGG GGCCCAGGCT GCGAACAAAG GCGGCGCGGG GCGCGCGGCC GGGGCTGGCG CGCGTCTCTC CGGCAGGAGG CGGTGGCGGC GCCGCGCCCG AGCCCGCATT CCTCAGAAGC GCCCGGAGCC CGCGGGGCGA CGTCACCCCC GGCTCCGCCC CCGTCCCTCC CCGAGCAAAG TAACTCTTGA CTAACAGGAG CAGCCTCCGC CGAGCATGGA GAGCTGCCGC CGCGGCCGGC CGGCGACGCT GGCGACGCTT TCGCCCCTGA GGTAGTTTGG CGACCGCGAA GAAGGAAAAA GGGCGGGCGG GCGGCTGTCC TCTCACCGTC CTCACCCCGC GAGGCCCGGC CCGCTCCTCC GTCGTGGATT TCGCGGCGAT CCCCCCGGCA GCTCTTTGCA AAGCTGCTTG AAACTTCTCC CAAACTCGGC GTCCCCGACG AACGCCTGGA GTCCTGGGCT CACGAGGGGT GAGCCAGGTC CCCGCTAGGG CTGGGGACAA GGATCGTGGG GAGCTCTCTC TGTCCGGGGG TGGGGAACAC AGGGTAGAGG GAGGGCTGTC CCCAGAGTTC GTGCCAGGTG GGACGCGGGG CACCCATTGT TCCTCTCCGA AGCTTGCTCG GGGCTCAGGC TGGCACGGTC TAGCCGGAGA GTGTGGGGAC CTGCTGGCTT CGGCGTCTCG CGTGGCCTGC GCCGGGCTAG TGGGGAAGAG AGAAAGAAAA AGTAGTTACG ACTCCCGTGA CGGCACTCTG TTGCTTGTGG TGCGGGTTTG TTGCTGTCTG CCACTTGGGT GTTTAAACAA ATTCCCTGGG AAGCCATTGT CAGAAATGTG GAGATTCGAA GGGACTGACC TCGGCGCGCT TTGCCAGGTG CTTTTTGTCC CGGGAATAAC CTCCCCTGAC TATTGTCTAA CTACTTCCCC GTCCCTCCCG GAGTCCCCTT TTCTCCTCCC CCAGCTCTGG GTTGCTCCCG GGCTTGCCCT GTGCGCTCGG GCACTGCTTG GAGCATGTTC TGTGTGTGTG TTGGCGGAGC

GE100003, scramble sequence in pCas-Guide vector



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Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is

designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

RefSeq: NM 001135648, NM 001291981, NM 001291982, NM 001291983, NM 001291984,

NM 002844

UniProt ID: Q15262

Synonyms: R-PTP-kappa

Summary: The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP)

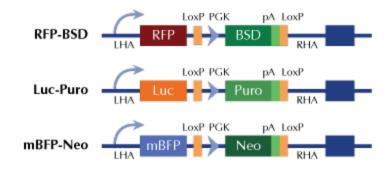
family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region, a single transmembrane region, and two tandem catalytic domains, and thus represents a receptor-type PTP. The extracellular region contains a meprin-A5 antigen-PTP mu (MAM) domain, an Ig-like domain and four fibronectin type III-like repeats. This PTP was shown to mediate homophilic intercellular interaction, possibly through

the interaction with beta- and gamma-catenin at adherens junctions. Expression of this gene was found to be stimulated by TGF-beta 1, which may be important for the inhibition of

keratinocyte proliferation. [provided by RefSeq, Jul 2008]

Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter