

Product datasheet for **KN207950**

PTP epsilon (PTPRE) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	PTP epsilon
Locus ID:	5791
Components:	<p>KN207950G1, PTP epsilon gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ACCAGCAGGAGTGGACACAA</p> <p>KN207950G2, PTP epsilon gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCGCGCAGATCGCGCTGCAG</p> <p>KN207950D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

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TCGCACCAGA AGCGCACGGG GTGCCCTGCG TGTCCACAC CTGCTGCAAG ACCAGGGCGA GTCCCTAGTC
AGGCCACTTC CTGGTGACA GGGATAGGGC AGGGAGAGGC AGGGCCTTGC CTTTGCTCTC CACCAGGTGT
GAGTGCCCTGC CATACCTGA CCCTCTGTCT ACGCACCTGG GTCCCGGGCG AGTGGCTGGA CCAGGCCTCC
CCGAAGGGG CACCAGCCTT GAGTAAACGG ATGCCACAG TGTCTGGGTG CTCCCAGGGC AGGGCCGACG
GGCCTCAGGG CCATACCCGC CTCGCAGGTG GGGCGGGCGC CCTGGATGCG CTCCCAGGGC CGGGCACCAG
GCGTCGCCCC CGCTCCTCGC AGCGCCCAGG CCCCCGCCCC CGCCGCGGAG CCACAGCCGG AGCTGGAGCC
GAGGCGGGCG CGGGACGCGG CCGGCCGGAC AAATTTCTG CTAGGCTGCG GACAGCGGGC GGCAGGAGCC
GGCAGGAGCC GCTTCAGGAA CCCACGGCCT CTGCGCGTCC CCGCGACCCT TCTTCGCGCC CGGCGAAGAC
AGCCGGGCGC CCCGAGGGC GCGGGCAGG CGCCCGGGAG CCTGTGGGGA ACTGTGCACC CCGGGAGGCC
CAAGCAGGCC GGGGCGCTGC CTCGGCCGCT GCCGCGGGAG GGAGGGGGCC CTCCGGGGCT CAGAGTCCGG
ACCCCGGCC CGCCGCCCC GCGGCGCGCC CAGTACCAGC GGCTGGGGCC CGTACGACC CCGACCCCGG
CCTGTGGCGC GTCCCTCAC CCGGAGTCCC CAGCCCACT TGGCGACCAC AGTGGCAGTG CTCACGCTCC
CTCTCGGTAA ACAGGAGGAG GCGCGCGTG TCTGCGGGTG GCTACAGTGC GCGGGGGCCG GCGGCAGGGC
GGCGTACGTG AAAGCGGGC ACACAGAGAG GGGGTGCAGG CCGCGCGTGG GGGGCTGCGC CCACTCGAGG
CTGAGGGTG GAGCCTTTGA AGAAAGTGGC TCGAGTTGTG CCAACTCTGG GAGGGGCGG CGCTCTGCCA
GGATGCTGCC CCGCAGCCGG GCGGGCGCCC GCGCCTTCCC AGGGAGGAG GTGGAGCGGG ATGCAGCAGC
CGCCGGGGGT CCGAGATGCG GCAGGGAGAC CCTGGCAGGT GGTCCAGGCT GGACTGCCCG GATTTGCAGG
GTCGACGACC
```

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_001316676](#), [NM_001316677](#), [NM_006504](#), [NM_130435](#), [NM_001323354](#), [NM_001323355](#), [NM_001323356](#), [NM_001323357](#)

UniProt ID: [P23469](#)

Synonyms: HPTPE; PTPE; R-PTP-EPSILON

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. Several alternatively spliced transcript variants of this gene have been reported, at least two of which encode a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains; another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform of this PTP. Studies of the similar gene in mice suggested the regulatory roles of this PTP in RAS related signal transduction pathways, cytokine-induced SATA signaling, as well as the activation of voltage-gated K⁺ channels. [provided by RefSeq, Oct 2015]

Product images:

