

Product datasheet for KN207950BN

OriGene Technologies, Inc.

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

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo Symbol: PTP epsilon

Locus ID: 5791

Components: KN207950G1, PTP epsilon gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN207950G2, PTP epsilon gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN207950BND**, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

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,

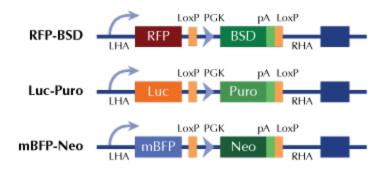
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Product images:

Donor Vector Edited Chromosome



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