

Product datasheet for KN207950RB

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PTP epsilon (PTPRE) 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-BSD 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) **KN207950RBD**, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

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:

Donor Vector Edited Chromosome



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