

## Product datasheet for KN217570BN

#### OriGene Technologies, Inc.

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## PTP kappa (PTPRK) 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 kappa

**Locus ID:** 5796

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

**KN217570G2**, PTP kappa gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN217570BND**, 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 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

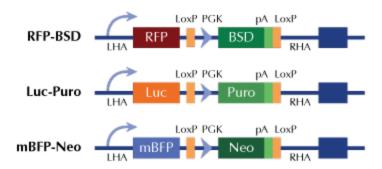
keratinocyte proliferation. [provided by RefSeq, Jul 2008]





# **Product images:**

### Donor Vector Edited Chromosome



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