

Product datasheet for KN219912RB

OriGene Technologies, Inc.

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RPTP mu (PTPRM) 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: RPTP mu Locus ID: 5797

Components: KN219912G1, RPTP mu gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN219912G2, RPTP mu gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN219912RBD**, donor DNA containing left and right homologous arms and RFP-BSD

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: <u>NM 001105244</u>, <u>NM 002845</u>

UniProt ID: P28827

Synonyms: hR-PTPu; PTPRL1; R-PTP-MU; RPTPM; RPTPU

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 has been shown to mediate cell-cell aggregation through the interaction with another molecule of this PTP on an adjacent cell. This PTP can interact with scaffolding

protein RACK1/GNB2L1, which may be necessary for the downstream signaling in response to

cell-cell adhesion. Alternative splicing results in multiple transcripts encoding distinct

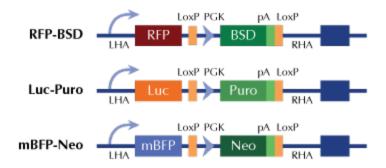
isoforms. [provided by RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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