

# **Product datasheet for KN213944LP**

### OriGene Technologies, Inc.

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## PTPRD Human Gene Knockout Kit (CRISPR)

#### **Product data:**

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: PTPRD Locus ID: 5789

**Components: KN213944G1**, PTPRD gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN213944G2**, PTPRD gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN213944LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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 001040712, NM 001171025, NM 002839, NM 130391, NM 130392, NM 130393

UniProt ID: P23468

Synonyms: HPTP; HPTPD; HPTPDELTA; PTPD; RPTPDELTA

**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 contains an extracellular region, a single transmembrane segment and two tandem

intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. The

extracellular region of this protein is composed of three Ig-like and eight fibronectin type III-like domains. Studies of the similar genes in chicken and fly suggest the role of this PTP is in promoting neurite growth, and regulating neurons axon guidance. Multiple alternatively spliced transcript variants of this gene have been reported. A related pseudogene has been

identified on chromosome 5. [provided by RefSeq, Jan 2010]





# **Product images:**

### Donor Vector Edited Chromosome



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