

## **Product datasheet for TL310050**

## OriGene Technologies, Inc.

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## RPTP mu (PTPRM) Human shRNA Plasmid Kit (Locus ID 5797)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: RPTP mu (PTPRM) Human shRNA Plasmid Kit (Locus ID 5797)

**Locus ID:** 5797

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

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** PTPRM - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5797).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001105244, NM 002845, NM 002845.1, NM 002845.2, NM 002845.3, NM 001105244.1,

BC040543, BC051651, BC151842, NM 002845.4, NM 001105244.2

UniProt ID: P28827

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).