

Product datasheet for RC219912

RPTP mu (PTPRM) (NM_002845) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPTP mu (PTPRM) (NM_002845) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPRM
Synonyms:	hR-PTPu; PTPRL1; R-PTP-MU; RPTPM; RPTPU
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC219912 representing NM_002845 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219912 representing NM_002845
 Red=Cloning site Green=Tags(s)

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 YFQAASRANGETKIDCVQVATKGAATPKPVPEPEKQTDHTVKIAGVIAGILLFVIFLGVVLMKRRKLA
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 QSAPWDSAKKDENRMKNRYGNI IAYDHSRVLQTI EGDTSNDYINGNYIDGYHRPNHYIATQGPMQETIY
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 QHPLPNTVKDFWRLVLDYHCTSVVMLNDVPAQLCPQYWPENGVHRHGP IQVEFVSADLEEDIISRIFRI
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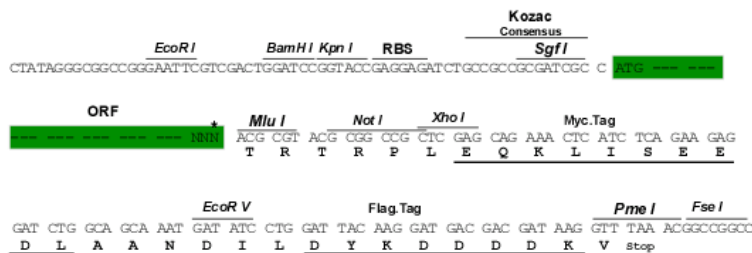
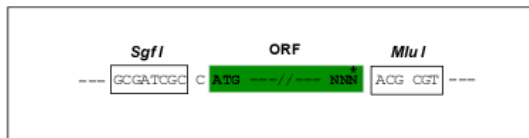
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Restriction Sites:

Sgfl-MluI

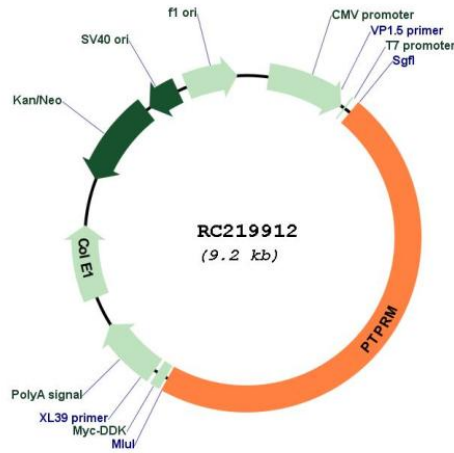
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_002845

ORF Size: 4356 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_002845.4
RefSeq Size:	5065 bp
RefSeq ORF:	4359 bp
Locus ID:	5797
UniProt ID:	P28827
Cytogenetics:	18p11.23
Domains:	Y_phosphatase, MAM, PTPc_motif, IG, FN3
Protein Families:	Druggable Genome, Phosphatase, Transmembrane
Protein Pathways:	Adherens junction, Cell adhesion molecules (CAMs)
MW:	163.68 kDa
Gene Summary:	<p>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]</p>