

Product datasheet for **RG226398**

RPTP mu (PTPRM) (NM_001105244) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | RPTP mu (PTPRM) (NM_001105244) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | RPTP mu |
| Synonyms: | hR-PTPu; PTPRL1; R-PTP-MU; RPTPM; RPTPU |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG226398 representing NM_001105244 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGGGACTTGGGACTTGCTGGCGACTTTGGCCGACTTTTGCTAACTGCGGCGGGCGAGACGTTCT
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CAAGGAAGTACCTTTGAAGAGAAGATATTTCTTCAGTGGAGAGAACCAACTCAAACATATGGTGTAAATCA
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ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

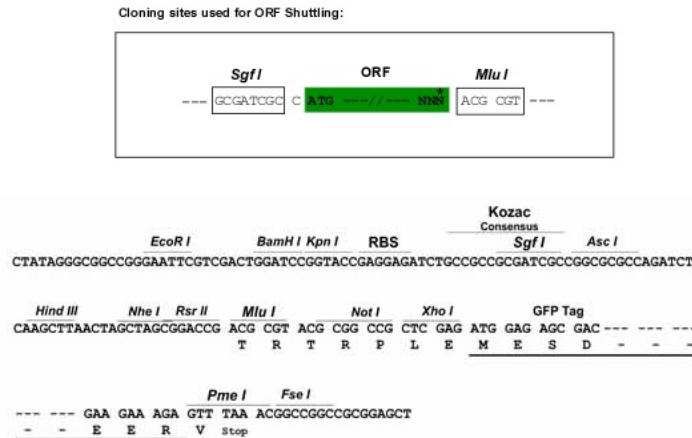
Protein Sequence: >RG226398 representing NM_001105244
 Red=Cloning site Green=Tags(s)

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 NRAELAISTFWPNFYQVIFEVITSGHQGYLAIDEVKVLGHPCTRTPHFLRIQNEVNAGQFATFQCSAIG
 RTVAGDRLWLQGDIVRDAPLKEIKVTSRRFIA SFNVVNTTKRDAGKYRCMIRTEGGVGISNYAELVKE
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 RRTKKTTEILKCYVPVPIHFQNASLLNSQYFAAEFPADSLQAAQPTIGDNKTYNGYWNTPLLPYKSYRI
 YFQAASRANGETKIDCVQVATKGAATPKPVPEPEKQTDHTVKIAGVIAGILLFVIIFLGVVLMKRRKLA
 KKRKETMSSTRQEMTMVNSMDKSYAEQGTNCDEAF SFMDTHNLNGRSVSSPSSFTMKTNTLSTVPSNY
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 YIATQGPQETIYDFWRMWHENTASIIIMVTNLVEVGRVKCKYWPDDTEIYKDIKVTLIETELLA EYVI
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 IDIMLMAEREGVVDIYNCVRELRSRRVNMVQTEEQYVFIHDAILEACLGDTSVPASQVRSLYDMNKL
 DPQTNSSQIKEEFRTLNMVPTPLRVEDCSIALLPRNHEKNRCMDILPPDRCLPFLITIDGESSNYINAAL
 MDSYKQPSAFIVTQHPLPNTVKDFWRLVLDYHCTSVVMLNDVDP AQLCPQYWPENGVRHGHPIQVEFVSA
 DLEEDIISRIFRIYNAARPDG YRMVQQFQFLGWPMYRDPVSKRSFLKLI RQVDKWQEEYNGGEGRTV
 HCLNGGGRSGTFCAISIVCEMLRHQRTVDVYFHAVKTLRNNKPNMVDLLDQYKFCYEVALEYLNSG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

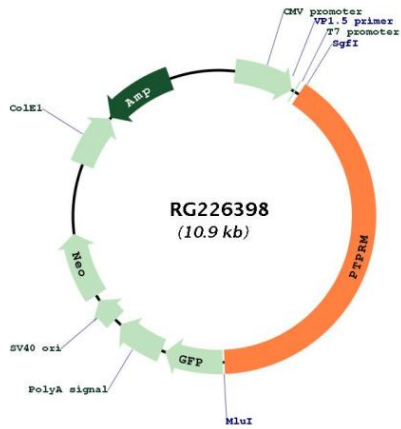


ACCN: NM_001105244

ORF Size: 4395 bp

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|-------------------------------|---|
| 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_001105244.2 |
| RefSeq Size: | 5624 bp |
| RefSeq ORF: | 4398 bp |
| Locus ID: | 5797 |
| UniProt ID: | P28827 |
| Cytogenetics: | 18p11.23 |
| Protein Families: | Druggable Genome, Phosphatase, Transmembrane |
| Protein Pathways: | Adherens junction, Cell adhesion molecules (CAMs) |
| Gene 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:



Circular map for RG226398