

Product datasheet for **RC214198**

PTPRU (NM_133177) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPRU (NM_133177) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPRU
Synonyms:	FMI; hPTP-J; PCP-2; PTP; PTP-J; PTP-PI; PTP-RO; PTPPSI; PTPRO; PTPU2; R-PTP-PSI; R-PTP-U
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC214198 representing NM_133177 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

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Protein Sequence: >RC214198 representing NM_133177
 Red=Cloning site Green=Tags(s)

MARAQALVLALTFQLCAPETETPAAGCTFEEASDPAVPCEYSQAQYDDFQWEQVRIHPGTRAPADLPHGS
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 VYDYGCTSI VMLNQLNQSNSAWPCLQYWPEPGRQYGLMEVEFMSGTADDELVARVFRVQNISREGHLLV
 RHFQFLRWSAYRDT PDSKKAFLHLLAEVDKWQAESGDGRTIVHCLNGGGRSGTFCACATVLEMIRCHNLV
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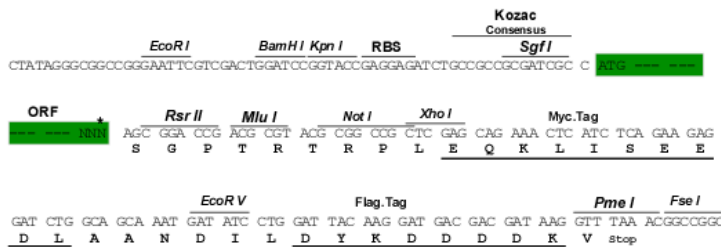
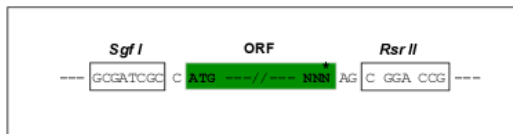
SGPTRRRL**EQKLI**SEEDLAANDILDYKDDDDK**V**

Restriction Sites:

SgfI-RsrII

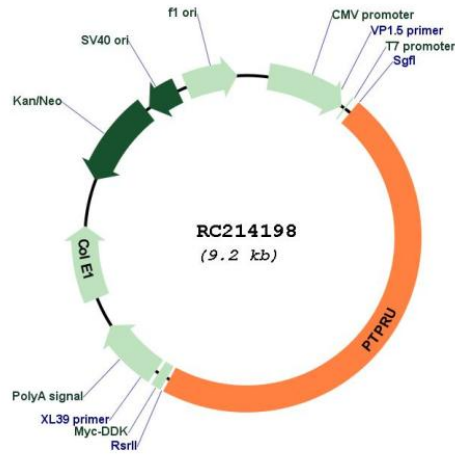
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_133177

ORF Size: 4320 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:

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_133177.4](#)

RefSeq Size: 5614 bp

RefSeq ORF: 4323 bp

Locus ID: 10076

UniProt ID: [Q92729](#)

Cytogenetics: 1p35.3

Protein Families: Transmembrane

MW: 161.6 kDa

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 intracellular catalytic domains, and thus represents a receptor-type PTP. The extracellular region contains a meprin-A5 antigen-PTP (MAM) domain, Ig-like and fibronectin type III-like repeats. This PTP was thought to play roles in cell-cell recognition and adhesion. Studies of the similar gene in mice suggested the role of this PTP in early neural development. The expression of this gene was reported to be regulated by phorbol myristate acetate (PMA) or calcium ionophore in Jurkat T lymphoma cells. Alternatively spliced transcript variants have been reported. [provided by RefSeq, Aug 2010]