

Product datasheet for RC221816

PTP rho (PTPRT) (NM_007050) Human Tagged ORF Clone

Product data:

| | |
|--------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PTP rho (PTPRT) (NM_007050) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | PTPRT |
| Synonyms: | R-PTP-T; RPTP-rho; RPTPrho |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| ORF Nucleotide Sequence: | >RC221816 representing NM_007050 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGAGCTCGCCGCGCTCGCCCTCAGCCTGCTCCTGAGGCTGCAGCTGCCGCCACTGCCGGCGCCC
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GGGTCATCACGCTCTACGAGATCAACTACAAGGCTGTCGGCTCGCTGGACCCAAGTGTGACCTCTCGAG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221816 representing NM_007050
 Red=Cloning site Green=Tags(s)

MASLAALALSLLLRLQLPPLPGARAQSAAGGCSFDEHYSNCGYSVALGTNGFTWEQINTWEKPMLDQAVP
 TGSFMMVNSSGRASGQKAHLLPTLKENDTHCIDFHYYFSSRDRSSPGALNVYVKVNGGPQGNPVWVNSG
 VVTEGWVKAELAI STF WPHFYQVIFESVSLKGHGPGYIADVEVRVLAHPCRKAPHFLRLQNVENVGQNA
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 TYSFTIKASTAKGFGPPVTTRIATKISAPSMPEYDTPNETDITITVMLKPAQSRGAPVSVYQLVVK
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 YSIYFQALSKANGETKINCVRLATKGASTQNSNTVEPEKQVDNTVKMAGVIAGLLMFIILLGVMLTIKR
 RRNAYSYSYYLKLAKKQKETQSGAQREMGVVASADKPTTKLSASRNDEGFSSSSQDVNGFTDGRGELSQ
 PTLTIQTHPYRTCDPVMSYPRDQFQPAIRVADLLQHITQMKRGQGYGFKEEYEALPEGQTASWDTAKED
 ENRNKNRYGNIISYDHSRVLLVLDGDPHSDYINANYIDGYHRPRHYIATQGMQETVKDFWRMIWQENS
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 PDHGVPCYATGLLGFVRQVKFLNPPEAGPIVVHCSAGAGRTGCFIAIDTMLDMAENEGVVDIFNCVREL
 AQRVNLVQTEEQYVVDHDAILEACLCGNTAIPVCEFRSLYYNISRLDPQTNSSQIKDEFQTLNIVTPRVR
 PEDCSIGLLPRNHDKNRSMDVLPDRCLPFLISVDGESSNYINAALMDSHKQPAAFVVTQHPLNPTVADF
 WRLVFDYNCSSVVMLNEMDTAQFCMQYWPEKTSGCYGP IQVEFVSADIDEDIHRIFRICNMARPQDGYR
 IVQHLQYIGWPAYRDTPPSKRSLKVVRRLEKWQEYDQGREGRVTVHCLNGGGRSGTFCAICSVCEMIQQ
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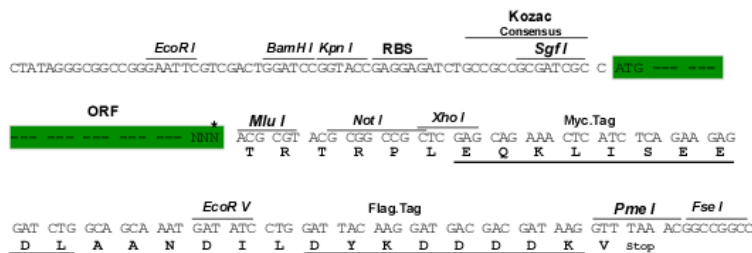
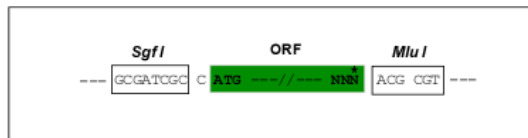
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

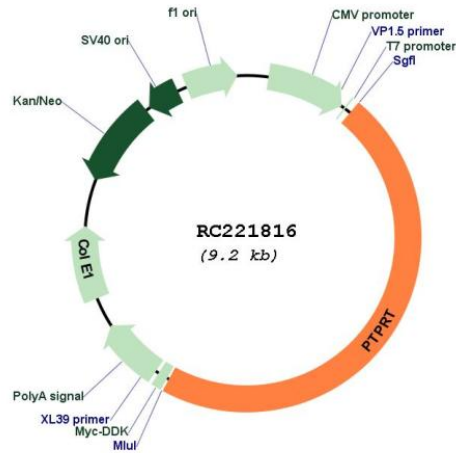
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_007050

ORF Size: 4323 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_007050.6](#)

RefSeq Size: 12644 bp

RefSeq ORF: 4326 bp

Locus ID: 11122

UniProt ID: [O14522](#)

Cytogenetics: 20q12-q13.11

MW: 162.1 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. The protein domain structure and the expression pattern of the mouse counterpart of this PTP suggest its roles in both signal transduction and cellular adhesion in the central nervous system. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have been reported. [provided by RefSeq, Jul 2008]