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Product datasheet for RG221816

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:	TurboGFP
Symbol:	PTPRT
Synonyms:	R-PTP-T; RPTP-rho; RPTPrho
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG221816 representing NM_007050
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGAGCCTCGCCGCGCTCGCCCTCAGCCTGCTCCTGAGGCTGCAGCTGCCGCCACTGCCCGGCGCCC
GGGCTCAGAGCGCCGCAGGTGGCTGTTCCTTTGATGAGCACTACAGCAACTGTGGTTATAGTGTGGCTCT
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GAATCCATCCAAGGGGGGCCCTTTGAGGAGAAGATCTACATCCAGTGGAAACCTCCCAATGAGACCAATG
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CAAAACATCATTGACGTGTTCCACATCGTGAAAACACTGCGTAACAACAAATCCAACATGGTGGAGACCC
TGGAACAGTATAAATTTGTATACGAGGTGGCACTGGAATATTTAAGCTCCTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221816 representing NM_007050
Red=Cloning site Green=Tags(s)

MASLAALALSLLLRLQLPPLPGARAQSAAGGCSFDEHYSNCGYSVALGTNGFTWEQINTWEKPMLDQAVP
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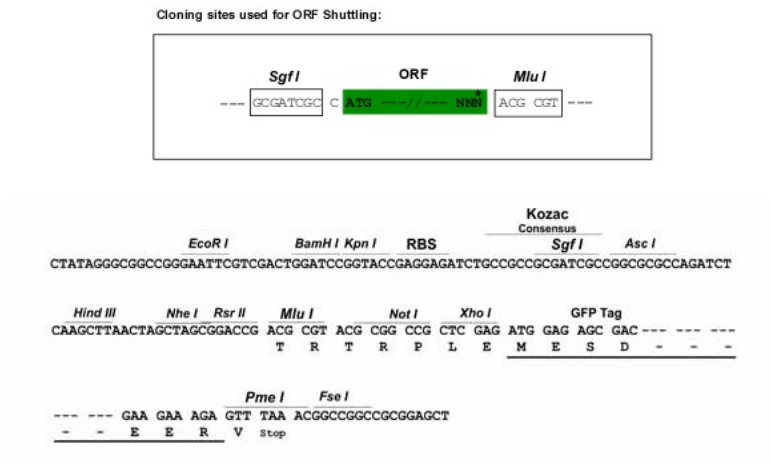
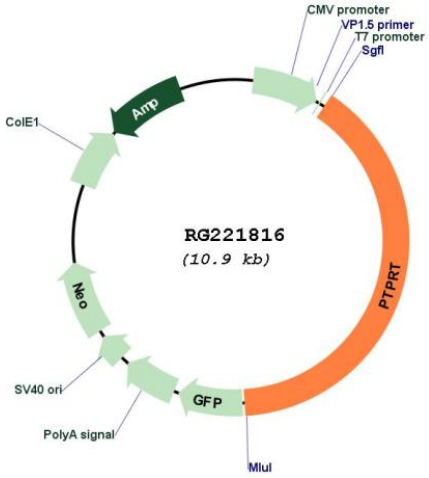
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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
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]