

## Product datasheet for **RG207950**

### PTP epsilon (PTPRE) (NM\_006504) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTP epsilon (PTPRE) (NM_006504) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTP epsilon
Synonyms:	HPTPE; PTPE; R-PTP-EPSILON
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG207950 representing NM\_006504  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCCCTTGTGTCCACTCCTGCTGGTGGGTTTTAGCTTGCCGCTCGCCAGGGCTCTCAGGGCAACG  
 AGACCACTGCCGACAGCAACGAGACAACCACGACCTCAGGCCCTCCGACCCGGGCGCCTCCCAGCCGCT  
 GCTGGCCTGGCTGCTACTGCCGCTGCTGCTCCTCCTCGTGCTCCTTCTCGCCGCTACTTCTTCAGG  
 TTCAGGAAGCAGAGGAAAGCTGTGGTCAGCACCAGCGACAAGAAGATGCCCAACGGAATCTTGGAGGAGC  
 AAGAGCAGCAAAGGGTGTGCTGCTCAGCAGGTACCCTCAGGGCCCAAGAAGTATTTCCCATCCCCGT  
 GGAGCACCTGGAGGAGGAGATCCGTATCAGATCCGCCGACGACTGCAAGCAGTTTCGGGAGGAGTTCAAC  
 TCATTGCCATCTGGACACATAACAAGAACTTTGAACTGGCAAATAAAGAAGAAAACAGAGAAAAAACA  
 GATATCCCAACATCCTTCCCAATGACCATTCTAGGGTGATTCTGAGCCAACCTGGATGGAATTCCTGTTC  
 AGACTACATCAATGCTTCTACATAGATGGTTACAAAGAGAAGAATAAATTCATAGCAGCTCAAGTCCC  
 AAACAGGAAACGGTTAACGACTTCTGGAGAATGGTCTGGGAGCAAAAGTCTGCGACCATCGTCATGTTAA  
 CAAACTTGAAAGAAAGGAAAGAGGAAAAGTGCCATCAGTACTGGCCCGACCAAGGCTGCTGGACCTATGG  
 AAACATCCGGGTGTGCTGGAGGACTGCGTGGTTTTGGTCGACTACACCATCCGGAAGTTCTGCATACAG  
 CCACAGCTCCCGACGGCTGCAAGCCCCAGGCTGGTCTCACAGCTGCACTTACCAGCTGGCCCGACT  
 TCGGAGTGCCTTTTACCCCCATTGGGATGCTGAAGTTCCTCAAGAAAGTAAAGACGCTCAACCCCGTGA  
 CGCTGGGCCCATCGTGGTCCACTGTAGCGCGGGCGTGGCCGGACGGGCACCTTCATTGTGATCGATGCC  
 ATGATGGCCATGATGCACGCGGAGCAGAAGGTGGATGTGTTTGAATTTGTGCTCGAATCCGTAATCAGC  
 GCCCTCAGATGGTTCAAACGGATATGCAGTACAGTTCATCTACCAAGCCTTACTCGAGTACTACCTTA  
 CGGGGACACAGAGCTGGACGTGCTCCTCACTGGAGAAGCACCTGCAGACCATGCACGGCACCAACCCAC  
 TTCGACAAGATCGGGCTGGAGGAGGAGTTCAGGAAATTGACAAATGTCCGGATCATGAAGGAGAACATGA  
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 CGACAGAAGGACTATTTTCATCGCCACCCAGGGGCCACTGGCACACACGGTTGAGGACTTCTGGAGGATGA  
 TCTGGGAATGAAATCCACACTATCGTGATGCTGACGGAGGTGCAGGAGAGAGAGCAGGATAAATGCTA  
 CCAGTATTGGCCAACCGAGGGCTCAGTTACTCATGGAGAATAACGATTGAGATAAAGAATGATACCCTT  
 TCAGAAGCCATCAGTATACGAGACTTTCTGGTCACTCTCAATCAGCCCCAGGCCCGCCAGGAGGAGCAGG  
 TCCGAGTAGTGCCAGTTTCACTTCCACGGCTGGCCTGAGATCGGGATTCGCCCGAGGGCAAAGGCAT  
 GATTGACCTCATCGCAGCCGTGCAGAAGCAGCAGCAGCAGACAGGCAACCACCCATCACCGTGCCTGC  
 AGTGCCGGAGCTGGGCGAACAGGTACATTCATAGCCCTCAGCAACATTTTGGAGCGAGTAAAAGCCGAGG  
 GGCTTTTATAGATGATTTCAAGCTGTGAAGATTTACGACTTCAGAGACCACATATGGTGCAAACCCCTGGA  
 ACAGTATGAATTCTGCTACAAAGTGGTACAAGATTTTATTGATATATTTTCTGATTATGCTAATTTCAA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG207950 representing NM\_006504  
 Red=Cloning site Green=Tags(s)

```
MEPLCPLLLVGFSLPLARALRGNETTADSNETTSTSGPPDPGASQPLLAWLLLPLLLLLLVLAAAYFFR
FRKQRKAVVSTSDKKMPNGILEEQEQQRVMLLSRSPSGPKKYFPIPVEHLEEEIRIRSADDCKQFREEFN
SLPSGHIQGT FELANKEENREKNRYPNILPNDHSRVILSQLDGIPCSDIYINASYIDGYKEKNKFIAAQGP
KQETVNDFWRMVWEQKSATIVMLTNLKERKEEKCHQYWPDPQGCWTYGNIRVCVEDCVVLVDYTIKRFICIQ
PQLPDGCKAPRLVSQLHFTSWPDFGVFPPIGMLKFLKKVKTLPVHAGPIVVHCSAGVGRGTGTFIVIDA
MMAMMHAEQKVDVFEFVSRIRNQRPQMVQTDMYTFIYQALLEYYLYGDELTVSLSLEKHLQTMHGTTTH
FDKIGLEEEFRKLTNVRIMKENMRTGNLPANMKKARVIQIIPYDFNRVILSMKRGQEYTDYINASFIDGY
RQKDYFIATQGPLAHTVEDFWRMIWKSHTIVMLTEVQEREQDKCYQYWPTEGSVTHGEITIEIKNDTL
SEAISIRDFLVTLNQPARQEEQVRVVRQFHFHGWPEIGIPAEGKGMIDLIAAVQKQQQQTGNHPITVHC
SAGAGRTGTFIALSNILERVKAEGLLDVFQAVKSLRLQRPHMVQTLQYEFQYKVVQDFIDIFSDYANFK
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006504

**ORF Size:** 2100 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\\_006504.3](#), [NP\\_006495.1](#)

**RefSeq Size:** 5376 bp

**RefSeq ORF:** 2103 bp

**Locus ID:** 5791

**UniProt ID:** [P23469](#)

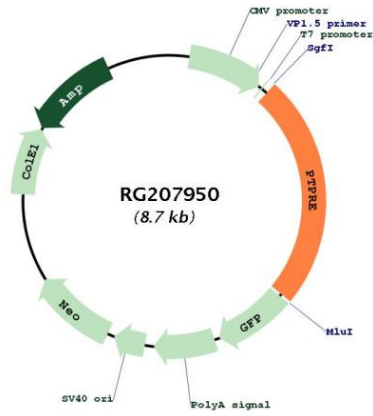
**Cytogenetics:** 10q26.2

**Domains:** Y\_phosphatase, PTPc\_motif

**Protein Families:** Druggable Genome, Phosphatase, Transmembrane

**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. Several alternatively spliced transcript variants of this gene have been reported, at least two of which encode a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains; another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform of this PTP. Studies of the similar gene in mice suggested the regulatory roles of this PTP in RAS related signal transduction pathways, cytokine-induced SATA signaling, as well as the activation of voltage-gated K<sup>+</sup> channels. [provided by RefSeq, Oct 2015]

Product images:



Circular map for RG207950