

Product datasheet for **RG222592**

PTP alpha (PTPRA) (NM_002836) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PTP alpha (PTPRA) (NM_002836) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | PTP alpha |
| Synonyms: | HEPTP; HLPR; HPTPA; HPTPalpha; LRP; PTPA; PTPRL2; R-PTP-alpha; RPTPA |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide
Sequence:

>RG222592 representing NM_002836
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGATTCCTGGTTCATTCTTGTCTGCTCGGCAGTGGTCTGATATGTGTCACTGCCAACATGCTACCA
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 CCAATTCTATAGGCATTACAATTCACCAAATGGAACGTGGCTTCCAGATAACCAGTTACGGATGCCAG
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 GCCCAGTACTGGCAGACCAAGGCTGCTGGACCTATGGGAATATTCGGGTGTCTGTAGAGGATGTGACTG
 TCCTGGTGGACTACACAGTACGGAAGTTCTGCATCCAGCAGGTGGGCGACATGACCAACAGAAAACACA
 GCGCCTCATCACTCAGTTCACCTTTACCAGCTGGCCAGACTTTGGGGTGCCTTTTACCCCGATCGGCATG
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 CGTCTGGAGCGTGTAAAGCAGAGGGGATTTTGGATGTCTTCCAGACTGTCAAGAGCCTGCGGCTACAG
 AGGCCACACATGGTCCAGACACTGGAACAGTATGAGTTCTGCTACAAGGTGGTGCAGGAGTATATTGATG
 CATTCTCAGATTATGCCAACTTCAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG222592 representing NM_002836
 Red=Cloning site Green=Tags(s)

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MDSWFILVLLGSGLICVSANNATTVAPSVGITRLINSSTAEPVKEEAKTSNPTSSLTSLSVAPTFSPNIT
LGPTYLTTVNSSSDNGTTRTASTNSIGITISPNGTWLPDNQFTDARTEPWEGNSSTAATTPETFPSPGN
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SPSTNRKYPLPVDKLEEEINRRMADDNKLFREEFNALPACPIQATCEAASKEENKEKNRYVNILPYDHS
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AQYWPDQGCWYGNIRVSVEDVTVLVDYTVRKFCIQVGDMTNRKPQRLITQFHFTSWPDFGVPTPIGM
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KNRVLQIIPYEFNRV IIPVKRGEENTDYVNASFIDGYRQKDSYIASQGPLLHTIEDFWRMIWEWKSCSIV
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RPHMVQTLEQYEFQYKVVQEYIDAFSDYANFK
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_002836

ORF Size: 2406 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_002836.2](#), [NP_002827.1](#)

RefSeq Size: 3643 bp

RefSeq ORF: 2409 bp

Locus ID: 5786

UniProt ID: [P18433](#)

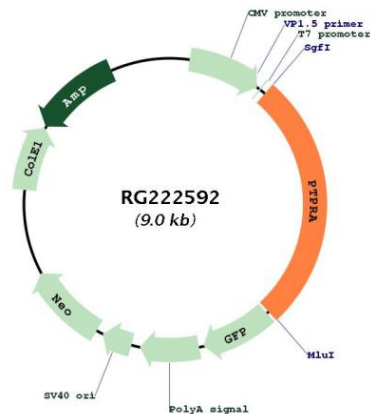
Cytogenetics: 20p13

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. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. This PTP has been shown to dephosphorylate and activate Src family tyrosine kinases, and is implicated in the regulation of integrin signaling, cell adhesion and proliferation. Three alternatively spliced variants of this gene, which encode two distinct isoforms, have been reported. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG222592