

Product datasheet for **SC120329**

PTP alpha (PTPRA) (NM_080840) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTP alpha (PTPRA) (NM_080840) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTP alpha
Synonyms:	HEPTP; HLPR; HPTPA; HPTPalpha; LRP; PTPA; PTPRL2; R-PTP-alpha; RPTPA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC120329 sequence for NM_080840 edited (data generated by NextGen Sequencing)

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ATGGATTCTGGTTCATTCTTGTCTGCTCGGCAGTGGTCTGATATGTGTCAAGTCCAAAC
AATGCTACCACAGTTGCACCTTCTGTAGGAATTACAAGATTAATTAACATCAACGGCA
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TCTTCAGACTCTGACAATGGGACCACAAGAAGCAAGCAAGCAATTTCTATAGGCATTACA
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TGGGAGGGGAATTCCAGCACCGCAGCAACCACTCCAGAAAATTTCCCTCCTTCAGATGAG
ACACCAATTATTGCGGTGATGGTGGCCCTGTCCTCTGCTAGTGATCGTGTATTATTATC
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GATGGACTGGTGTCTATGGAGATATTACAGTGGAACTGAAGAAGGAGGAGGAATGTGAG
AGCTACACCGTCCGAGACCTCCTGGTCACCAACACCAGGGAGAATAAGAGCCGGCAGATC
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ATCAGCATCATCGCCCGCTGCAGAAGCAGCAGCAGTCAAGGAAACCCATCACC
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CAGAGGCCACACATGGTCCAGACACTGGAACAGTATGAGTTCTGCTACAAGGTGGTGCAG
GAGTATATTGATGCATTCTCAGATTATGCCAACTCAAGTAA

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Clone variation with respect to NM_080840.2

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_080840 unedited GTCAACATTTGTATACGACTCACTATAGGCGGCCGCGAATTCGCACGAGGCGGCCGAAC GCCGCCGCGGAGCCGAGGCGGAGCCGCTGTCTCGTCCCAGCGGTCCCGCCAACGCC GACTCTGTGACACAACNAAAAAAAAACAAAGTATTTATGGAATTCCTGAGTGGTAA TGGATGATGCAGTTCAAATAACTAAGGACACATGTTCAAAGAGCATAATTAACCTTTTAA AAGAAGCTAATAAGCATGGATTCTGGTTCATTCTTGTCTGCTCGGCAGTGGTCTGATA TGTGTGAGTCCCAACAATGCTACCACAGTTGCACCTTCTGTAGGAATTACAAGATTAATT AACTCATCAACGGCAGAACCAGTTAAAGAAGAGGCCAAAACCTCAAATCCAACCTTCTCA CTAACCTCTCTTTCTGTGGCACCAACATTCAGCCCAAATAAATCTGGGACCCACCTAT TTAACCACTGTCAATTCTCAGACTCTGACAATGGGACCACAAGAACAGCAAGCACCAAT TCTATAGGCATTACAATTCACCAAAATGGAACGTGGCTTCCAGATAACCAGTTCACGGAT GCCAGAACAGAACCCTGGGAGGGGAATTCAGCACCGCAGCAACCACTCCAGAACTTTC CCTCTTCAGATGAGACCAATTATTGCGGTGATGGTGGCCCTGTCTCTGTAGTG ATCGTGTATTATCATAGTTNTGTACATGTTAAGGTTTAAAGAAACAAGCAAGCTGGG AGCCATTCGAATCTTTCCGCTTATCCAACGCCGCACTGANGATGTGNAGCCCCAGATG TGCCACTTCTGGCCAGATCCCAGCACACAGGAAATACCACCCCTGCCCGTGGACAGCT GGAAGAGAAAATACCGNAGATGGCAGAG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_080840 unedited NNAATTACTTTGNNACCGCGCCGATTCTANGATCGAGTTTTTTTTTTTTTTTTTTTTT TCAGGGAGTCAAAGCTTTTATTACCTGATAGTCCCTAGTGTGGTCCAGAGATACCGCTC TGGTCTTACTCCCCATGATATCAGTGGTGGGATGGGGAGGGGACCAGGGAGAGAG GGGAGGGATATTTACAGTGCATGGTGGTACGGGGACAACCACTTCTCGAGAGCTCTGA GAACTTTGTGCTTTTTTTCTTAGTTGGTCCGAGCTACCTGGAATGGATTTGTGTTTAT CTTCTTTAGGGAAAGATGTATTAACCAAAGCACAATCCAGCCCAATTTCTCGGCTGAGGA TTTACGATATCAATCCAACATCACACTATTTAATCCCAATAAAACATTGGA AAAAG GACTATCAGTGTCAACACATTTACATATAAAATTTCCACCTAATAGGTAATAGAAGCCTA TGTACCAATTTCTAAAACAGTTAAGATATATACACAATTTGGGGTATATTAACAAAAC AGAATATTACAAAATATTAAGGCAATCCTCCTGGTCCACGACCTTGTGCGCTTAC TTGAAGTTGGCATAATCTGAGAATGCATCAATATACTCCTGCACCACCTGTAGCAGAAG TCATACTGTTCCAGTGTCTGGACCATGTGTGGCCTCTGTAGCCGAGGCTCTTGACAGTC TGAAGACATCCAAAATCCCCTCTGCTTTACACGCTCCNAGACGGTGTCTCANGGCACAG AAGGGTCCCCGCTCTTCTGCCCGCGCTGCAGTGCACGGTGTGGGGNGGGTTCCCT GACTGCTGCTGCTTCTGCACGGCGCGATGATGCTGATCATCCCTTNCGTA CTGGG GGATGCCACTTCAGCCAGCATGGAAGTGGACTGNCCGATCTGCGGCTCTATT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_080840
Insert Size:	3050 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_080840.1](#), [NP_543030.1](#)

RefSeq Size: 3279 bp

RefSeq ORF: 2382 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]

Transcript Variant: This variant (2) contains an alternate 5' UTR exon, and lacks an internal coding exon, when compared to variant 1. The resulting isoform (2) lacks a 9 aa internal segment, as compared to isoform 1.