

Product datasheet for **RC204392**

PTP alpha (PTPRA) (NM_080841) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTP alpha (PTPRA) (NM_080841) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTP alpha
Synonyms:	HEPTP; HLPR; HPTPA; HPTPalpha; LRP; PTPA; PTPRL2; R-PTP-alpha; RPTPA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC204392 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGATTCCTGGTTCATTCTTGTCTGCTCGGCAGTGGTCTGATATGTGTCACTGCAACAAATGCTACCA
CAGTTGCACCTTCTGTAGGAATTAACAAGATTAATTAACATCAACGGCAGAACCAGTTAAAGAAGAGGC
CAAACTTCAAATCCAATCTCTCACTAATCTCTTTCTGTGGCACCAACATTCAGCCAAATATAACT
CTGGGACCCACTATTTAACCCTGTCAATCTTCAGACTCTGACAATGGGACCACAAGAACAGCAAGCA
CCAATCTATAGGCATTACAATTCACCAAATGGAACGTGGCTTCCAGATAACCAGTTACGGATGCCAG
AACAGAACCCTGGGAGGGGAATTCAGCACCGCAGCAACCCTCCAGAACTTTCCCTCCTTCAGATGAG
ACACCAATTATTGCGGTGATGGTGGCCCTGTCTCTCTGCTAGTATCGTGTATTATCATAGTTTTGT
ACATGTTAAGGTTAAGAATAACAAGCAAGCTGGGAGCCATTCCAATCTTTCCGCTTATCCAACGGCCG
CACTGAGGATGTGGAGCCCAGAGTGTGCCACTCTGGCCAGATCCCAAGCACAACAGGAAATACCCA
CCCTGCCCGTGACAAGCTGGAAGAGGAAATTAACCGGAGAATGGCAGACGACAATAAGCTCTTCAGGG
AGGAATCAACGCTCTCCCTGCATGTCTATCCAGGCCACTGTGAGGCTGCTTCCAAGGAGGAAAAACA
GGAAAAAATCGATATGTAAACATCTTGCCCTATGACCACTCTAGAGTCCACCTGACACCGGTTGAAGGG
GTTCCAGATTCTGATTACATCAATGCTTCATTCATCAACGGTTACCAAGAAAAGAACAATTCATTGCTG
CACAAGGACCAAAAAGAAGAAACGGTGAATGATTCTGGCGGATGATCTGGGAACAAAACAGCCACCAT
CGTCATGGTTACCAACCTGAAGGAGAGAAAGGAGTGAAGTGCGCCAGTACTGGCCAGACCAAGGCTGC
TGGACCTATGGGAATATTCGGGTGTCTGTAGAGGATGTACTGTCTGGTGGACTACACAGTACGGAAAT
TCTGCATCCAGCAGGTGGGCGCATGACCAACAGAAAGCCACAGCGCCTCATCACTCCAGTTCCATTTAC
CAGCTGGCCAGACTTTGGGGTGCCTTTTACCCCGATCGGCATGCTCAAGTTCCTCAAGAAGGTGAAGGCC
TGTAACCTCAGTATGCAGGGCCATCGTGGTCCACTGCAGTGCAGGTGTAGGGGTACAGGTACCTTTG
TCGTATTGATGCCATGTGGACATGATGCATACAGAACGGAAGGTGGACGTGATGGCTTTGTGAGCCG
GATCCGGGCACAGCGCTGCCAGATGGTGCAAAACCGATATGCAGTATGTCTTCATATACCAAGCCCTCTG
GAGCATTATCTATGGAGATACAGAACTGGAAGTGAACCTCTAGAAACCCACCTGCAGAAAATTTACA
ACAAAATCCCAGGGACCAGCAACAATGGATTAGAGGAGGAGTTAAGAAGTTAACATCAATCAAAATCCA
GAATGACAAGATGCGGACTGGAACCTTCCAGCCAACATGAAGAAGAACCAGTGTTCACAGATCATTCCA
TATGAATTCACAGAGTATCATTCCAGTTAAGCGGGGCGAAGAGAATACAGACTATGTGAACGCATCCT
TTATTGATGGCTACCGCAGAAGGACTCCTATATCGCCAGCCAGGGCCCTCTTCTCCACACAATTGAGGA
CTTCTGGCGAATGATCTGGGAGTGGAAATCCTGTCTATCGTGTGCTAACAGAACTGGAGGAGAGAGGC
CAGGAGAAGTGTGCCAGTACTGGCCATCTGATGGACTGGTGTCTATGGAGATATTACAGTGGAACTGA
AGAAGGAGGAGGAATGTGAGAGCTACACCGTCCGAGACCTCCTGGTCACCAACACCAGGGAGAATAAGAG
CCGGCAGATCCGGCAGTTCCTTCCATGGCTGGCCTGAAGTGGGCATCCCCAGTACCGGAAAGGGCATG
ATCAGCATCATCGCCCGGTGCAGAAGCAGCAGCAGCAGTACAGGAACCAACCCATCACCCTGCAGTGA
GCGCCGGGCAGGAAGGACGGGGACCTTCTGTGCCCTGAGCACCTCCTGGAGCGTGTGAAAGCAGAGGG
GATTTTGGATGTCTTCCAGACTGTCAAGAGCCTGCGGCTACAGAGGCCACACATGGTCCAGACACTGGAA
CAGTATGAGTTCTGCTACAAGGTGGTGCAGGAGTATATTGATGCATTCTCAGATTATGCCAACTCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204392 protein sequence
Red=Cloning site Green=Tags(s)

MDSWFILVLLGSGLICVSANNATTVAPSVGITRLINSSTAEPVKEEAKTSNPTSSLTSLSVAPTFSPNIT
LGPTYLTTVNSSSDNGTTRTASTNSIGITISPNGTWLPDNQFTDARTEPWEGNSSTAATTPETFPPSDE
TPIIAVMVALSSLLVIVFIIIVLYMLRFKYYKQAGSHSNFRLSNGRTEDEVQSVPLLARSPSTNRKYP
PLPVDKLEEEINRRMADDNKLFREEFNALPACPIQATCEAASKEENKEKNRYVNILPYDHSRVHLPVEG
VPDSYINASFINGYQEKNFIAAQGPKEETVNDFWRMIWEQNTATIVMTNLKERKECKAQYWPDQGC
WTYGNIRVSVEDVTVLVDYTVRKFQIQVGDMTNRKPQRLITQFHFTSWPDFGVPFPIGMLKFLKVKVA
CNPQYAGAIVVHCSAGVGRGTGFVVIDAMLDMHTEKVDVYGFVSRIRARQCQMVQTMQYVFIYQALL
EHLYGDTELEVTSLLETHLQKIYNKIPGTSNNGLEEEFKLTSIKIQNDKMRTGNLPANMKKNRVLQIIP
YEFNRVIIPVKRGEENTDYVNASFIDGYRQKDSYIASQGPLLHTIEDFWRMIWEWKSCSIVMLTELEERG
QEKCAQYWPSDGLVSYGDITVELKKEEECESYTVRDLLVTNTRENKSRQIRQFHFGWPEVGIIPSDGKGM
ISIIAAVQKQQQSGNHPITVHCSAGAGRTGTFICALSTVLERVKAEGILDVFTVKSLRLQRPHMVQTL
QYEFQYKVVQEYIDAFSDYANFK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6522_g01.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_080841

ORF Size: 2379 bp

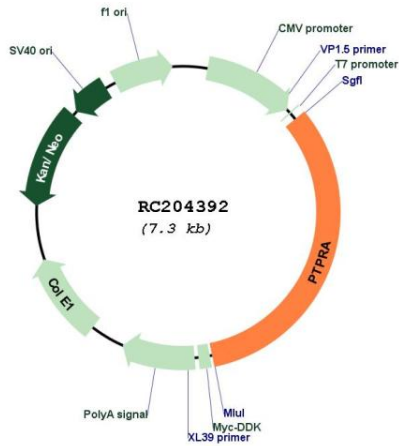
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

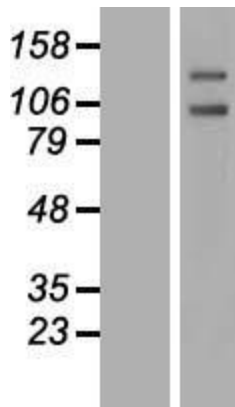
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_080841.1 , NP_543031.1
RefSeq Size:	3153 bp
RefSeq ORF:	2382 bp
Locus ID:	5786
UniProt ID:	P18433
Cytogenetics:	20p13
Domains:	Y_phosphatase
Protein Families:	Druggable Genome, Phosphatase, Transmembrane
MW:	89.7 kDa
Gene Summary:	<p>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]</p>

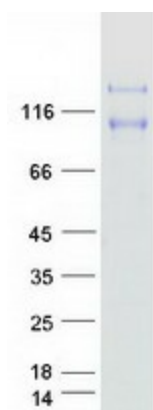
Product images:



Circular map for RC204392



Western blot validation of overexpression lysate (Cat# [LY409009]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC223746] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPRA protein (Cat# [TP304392]). The protein was produced from HEK293T cells transfected with PTPRA cDNA clone (Cat# RC204392) using MegaTran 2.0 (Cat# [TT210002]).