OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC223746

PTP alpha (PTPRA) (NM_080840) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTP alpha (PTPRA) (NM_080840) 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)

View online »

ORF Nucleotide Sequence:

>RC223746 representing NM_080840
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATTCCTGGTTCATTCTTGTTCTGCTCGGCAGTGGTCTGATATGTGTCAGTGCCAACAATGCTACCA
CAGTTGCACCTTCTGTAGGAATTACAAGATTAATTAACTCATCAACGGCAGAACCAGTTAAAGAAGAGGC
CAAAACTTCAAATCCAACTTCTTCACTAACTTCTCTTTCTGTGGCACCAACATTCAGCCCAAATATAACT
CTGGGACCCACCTATTTAACCACTGTCAATTCTTCAGACTCTGACAATGGGACCACAAGAACAGCAAGCA
CCAATTCTATAGGCATTACAATTTCACCAAATGGAACGTGGCTTCCAGATAACCAGTTCACGGATGCCAG
AACAGAACCCTGGGAGGGGAATTCCAGCACCGCAGCAACCACTCCAGAAACTTTCCCTCCTTCAGATGAG
ACACCAATTATTGCGGTGATGGTGGCCCTGTCCTCTCTGCTAGTGATCGTGTTTATTATCATAGTTTTGT
ACATGTTAAGGTTTAAGAAATACAAGCAAGCTGGGAGCCATTCCAATTCTTTCCGCTTATCCAACGGCCG
CACTGAGGATGTGGAGCCCCAGAGTGTGCCACTTCTGGCCAGATCCCCAAGCACCAACAGGAAATACCCA
CCCCTGCCCGTGGACAAGCTGGAAGAGGAAATTAACCGGAGAATGGCAGACGACAATAAGCTCTTCAGGG
AGGAATTCAACGCTCTCCCTGCATGTCCTATCCAGGCCACCTGTGAGGCTGCTTCCAAGGAGGAAAACAA
GGAAAAAAATCGATATGTAAACATCTTGCCTTATGACCACTCTAGAGTCCACCTGACACCGGTTGAAGGG
GTTCCAGATTCTGATTACATCAATGCTTCATTCATCAACGGTTACCAAGAAAAGAACAAATTCATTGCTG
CACAAGGACCAAAAGAAGAAACGGTGAATGATTTCTGGCGGATGATCTGGGAACAAAACACAGCCACCAT
CGTCATGGTTACCAACCTGAAGGAGAGAAAGGAGTGCAAGTGCGCCCAGTACTGGCCAGACCAAGGCTGC
TGGACCTATGGGAATATTCGGGTGTCTGTAGAGGATGTGACTGTCCTGGTGGACTACACAGTACGGAAGT
TCTGCATCCAGCAGGTGGGCGACATGACCAACAGAAAGCCACAGCGCCTCATCACTCAGTTCCACTTTAC
CAGCTGGCCAGACTTTGGGGTGCCTTTTACCCCGATCGGCATGCTCAAGTTCCTCAAGAAGGTGAAGGCC
TGTAACCCTCAGTATGCAGGGGCCATCGTGGTCCACTGCAGTGCAGGTGTAGGGCGTACAGGTACCTTTG
TCGTCATTGATGCCATGCTGGACATGATGCATACAGAACGGAAGGTGGACGTGTATGGCTTTGTGAGCCG
GATCCGGGCACAGCGCTGCCAGATGGTGCAAACCGATATGCAGTATGTCTTCATATACCAAGCCCTTCTG
GAGCATTATCTCTATGGAGATACAGAACTGGAAGTGACCTCTCTAGAAACCCACCTGCAGAAAATTTACA
ACAAAATCCCAGGGACCAGCAACAATGGATTAGAGGAGGAGTTTAAGAAGTTAACATCAATCAAAATCCA
GAATGACAAGATGCGGACTGGAAACCTTCCAGCCAACATGAAGAAGAACCGTGTTTTACAGATCATTCCA
TATGAATTCAACAGAGTGATCATTCCAGTTAAGCGGGGCGAAGAGAATACAGACTATGTGAACGCATCCT
TTATTGATGGCTACCGGCAGAAGGACTCCTATATCGCCAGCCAGGGCCCTCTTCTCCACACAATTGAGGA
CTTCTGGCGAATGATCTGGGAGTGGAAATCCTGCTCTATCGTGATGCTAACAGAACTGGAGGAGAGAGGC
CAGGAGAAGTGTGCCCAGTACTGGCCATCTGATGGACTGGTGTCCTATGGAGATATTACAGTGGAACTGA
AGAAGGAGGAGGAATGTGAGAGCTACACCGTCCGAGACCTCCTGGTCACCAACACCAGGGAGAATAAGAG
CCGGCAGATCCGGCAGTTCCACTTCCATGGCTGGCCTGAAGTGGGCATCCCCAGTGACGGAAAGGGCATG
ATCAGCATCATCGCCGCCGTGCAGAAGCAGCAGCAGCAGTCAGGGAACCACCCCATCACCGTGCACTGCA
GCGCCGGGGCAGGAAGGACGGGGACCTTCTGTGCCCTGAGCACCGTCCTGGAGCGTGTGAAAGCAGAGGG
GATTTTGGATGTCTTCCAGACTGTCAAGAGCCTGCGGCTACAGAGGCCACACATGGTCCAGACACTGGAA
CAGTATGAGTTCTGCTACAAGGTGGTGCAGGAGTATATTGATGCATTCTCAGATTATGCCAACTTCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223746 representing NM_080840
Red=Cloning site Green=Tags(s)

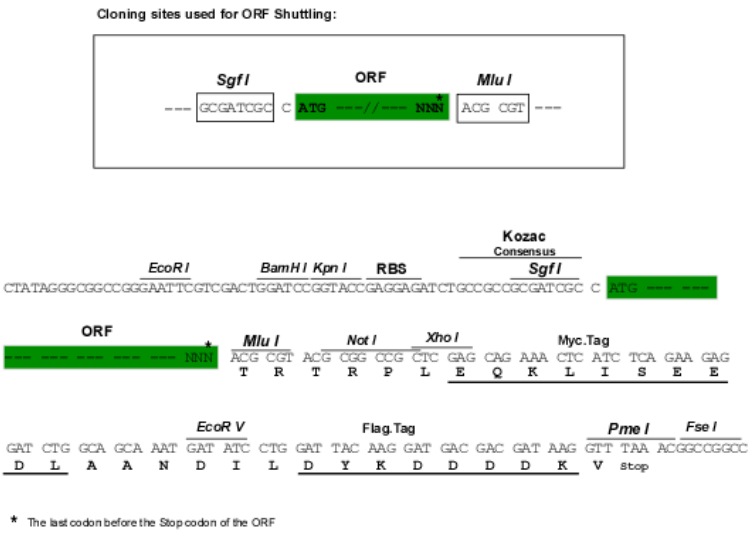
MDSWFILVLLGSGLICVSANNATTVAPSVGITRLINSSTAEPVKEEAKTSNPTSSLTSLSVAPTFSPNIT
LGPTYLTTVNSSDSDNGTTRTASTNSIGITISPNGTWLPDNQFTDARTEPWEGNSSTAATTPETFPPSDE
TPIIAVMVALSSLLVIVFIIIVLYMLRFKKYKQAGSHSNSFRLSNGRTEDVEPQSVPLLARSPSTNRKYP
PLPVDKLEEEINRRMADDNKLFREEFNALPACPIQATCEAASKEENKEKNRYVNILPYDHSRVHLTPVEG
VPDSDYINASFINGYQEKNKFIAAQGPKEETVNDFWRMIWEQNTATIVMVTNLKERKECKCAQYWPDQGC
WTYGNIRVSVEDVTVLVDYTVRKFCIQQVGDMTNRKPQRLITQFHFTSWPDFGVPFTPIGMLKFLKKVKA
CNPQYAGAIVVHCSAGVGRTGTFVVIDAMLDMMHTERKVDVYGFVSRIRAQRCQMVQTDMQYVFIYQALL
EHYLYGDTELEVTSLETHLQKIYNKIPGTSNNGLEEEFKKLTSIKIQNDKMRTGNLPANMKKNRVLQIIP
YEFNRVIIPVKRGEENTDYVNASFIDGYRQKDSYIASQGPLLHTIEDFWRMIWEWKSCSIVMLTELEERG
QEKCAQYWPSDGLVSYGDITVELKKEEECESYTVRDLLVTNTRENKSRQIRQFHFHGWPEVGIPSDGKGM
ISIIAAVQKQQQQSGNHPITVHCSAGAGRTGTFCALSTVLERVKAEGILDVFQTVKSLRLQRPHMVQTLE
QYEFCYKVVQEYIDAFSDYANFK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

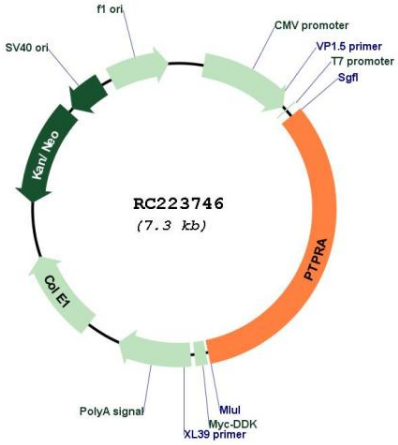
Cloning Scheme:



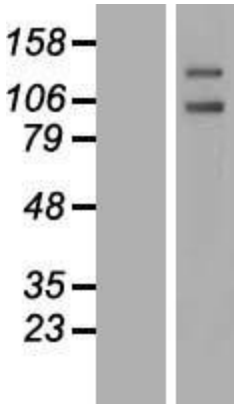
ACCN:	NM_080840
ORF Size:	2379 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	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
MW:	87.6 kDa
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 RC223746



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