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Product datasheet for RC207950

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:	Myc-DDK
Symbol:	PTP epsilon
Synonyms:	HPTPE; PTPE; R-PTP-EPSILON
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC207950 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCTTGTGTCCACTCCTGCTGGTGGGTTTTAGCTTGCCGCTCGCCAGGGCTCTCAGGGGCAACG
AGACCACTGCCGACAGCAACGAGACAACCACGACCTCAGGCCCTCCGGACCCGGGCGCCTCCCAGCCGCT
GCTGGCCTGGCTGCTACTGCCGCTGCTGCTCCTCCTCCTCGTGCTCCTTCTCGCCGCCTACTTCTTCAGG
TTCAGGAAGCAGAGGAAAGCTGTGGTCAGCACCAGCGACAAGAAGATGCCCAACGGAATCTTGGAGGAGC
AAGAGCAGCAAAGGGTGATGCTGCTCAGCAGGTCACCCTCAGGGCCCAAGAAGTATTTTCCCATCCCCGT
GGAGCACCTGGAGGAGGAGATCCGTATCAGATCCGCCGACGACTGCAAGCAGTTTCGGGAGGAGTTCAAC
TCATTGCCATCTGGACACATACAAGGAACTTTTGAACTGGCAAATAAAGAAGAAAACAGAGAAAAAAACA
GATATCCCAACATCCTTCCCAATGACCATTCTAGGGTGATTCTGAGCCAACTGGATGGAATTCCCTGTTC
AGACTACATCAATGCTTCCTACATAGATGGTTACAAAGAGAAGAATAAATTCATAGCAGCTCAAGGTCCC
AAACAGGAAACGGTTAACGACTTCTGGAGAATGGTCTGGGAGCAAAAGTCTGCGACCATCGTCATGTTAA
CAAACTTGAAAGAAAGGAAAGAGGAAAAGTGCCATCAGTACTGGCCCGACCAAGGCTGCTGGACCTATGG
AAACATCCGGGTGTGCGTGGAGGACTGCGTGGTTTTGGTCGACTACACCATCCGGAAGTTCTGCATACAG
CCACAGCTCCCCGACGGCTGCAAAGCCCCCAGGCTGGTCTCACAGCTGCACTTCACCAGCTGGCCCGACT
TCGGAGTGCCTTTTACCCCCATTGGGATGCTGAAGTTCCTCAAGAAAGTAAAGACGCTCAACCCCGTGCA
CGCTGGGCCCATCGTGGTCCACTGTAGCGCGGGCGTGGGCCGGACGGGCACCTTCATTGTGATCGATGCC
ATGATGGCCATGATGCACGCGGAGCAGAAGGTGGATGTGTTTGAATTTGTGTCTCGAATCCGTAATCAGC
GCCCTCAGATGGTTCAAACGGATATGCAGTACACGTTCATCTACCAAGCCTTACTCGAGTACTACCTCTA
CGGGGACACAGAGCTGGACGTGTCCTCACTGGAGAAGCACCTGCAGACCATGCACGGCACCACAACCCAC
TTCGACAAGATCGGGCTGGAGGAGGAGTTCAGGAAATTGACAAATGTCCGGATCATGAAGGAGAACATGA
GGACGGGCAACTTGCCGGCAAACATGAAGAAGGCCAGGGTCATCCAGATCATCCCGTATGACTTCAACCG
AGTGATCCTTTCCATGAAAAGGGGTCAAGAATACACAGACTACATCAACGCATCCTTCATAGACGGCTAC
CGACAGAAGGACTATTTCATCGCCACCCAGGGGCCACTGGCACACACGGTTGAGGACTTCTGGAGGATGA
TCTGGGAATGGAAATCCCACACTATCGTGATGCTGACGGAGGTGCAGGAGAGAGAGCAGGATAAATGCTA
CCAGTATTGGCCAACCGAGGGCTCAGTTACTCATGGAGAAATAACGATTGAGATAAAGAATGATACCCTT
TCAGAAGCCATCAGTATACGAGACTTTCTGGTCACTCTCAATCAGCCCCAGGCCCGCCAGGAGGAGCAGG
TCCGAGTAGTGCGCCAGTTTCACTTCCACGGCTGGCCTGAGATCGGGATTCCCGCCGAGGGCAAAGGCAT
GATTGACCTCATCGCAGCCGTGCAGAAGCAGCAGCAGACAGGCAACCACCCCATCACCGTGCACTGC
AGTGCCGGAGCTGGGCGAACAGGTACATTCATAGCCCTCAGCAACATTTTGGAGCGAGTAAAAGCCGAGG
GGCTTTTAGATGTATTTCAAGCTGTGAAGAGTTTACGACTTCAGAGACCACATATGGTGCAAACCCTGGA
ACAGTATGAATTCTGCTACAAAGTGGTACAAGATTTTATTGATATATTTTCTGATTATGCTAATTTCAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207950 protein sequence
Red=Cloning site Green=Tags(s)

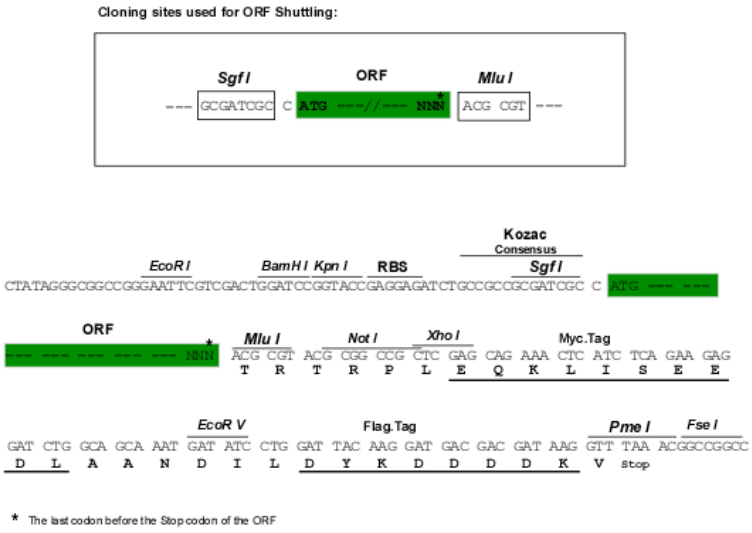
MEPLCPLLLVGFSLPLARALRGNETTADSNETTTTSGPPDPGASQPLLAWLLLPLLLLLLVLLLAAYFFR
FRKQRKAVVSTSDKKMPNGILEEQEQQRVMLLSRSPSGPKKYFPIPVEHLEEEIRIRSADDCKQFREEFN
SLPSGHIQGTFELANKEENREKNRYPNILPNDHSRVILSQLDGIPCSDYINASYIDGYKEKNKFIAAQGP
KQETVNDFWRMVWEQKSATIVMLTNLKERKEEKCHQYWPDQGCWTYGNIRVCVEDCVVLVDYTIRKFCIQ
PQLPDGCKAPRLVSQLHFTSWPDFGVPFTPIGMLKFLKKVKTLNPVHAGPIVVHCSAGVGRTGTFIVIDA
MMAMMHAEQKVDVFEFVSRIRNQRPQMVQTDMQYTFIYQALLEYYLYGDTELDVSSLEKHLQTMHGTTTH
FDKIGLEEEFRKLTNVRIMKENMRTGNLPANMKKARVIQIIPYDFNRVILSMKRGQEYTDYINASFIDGY
RQKDYFIATQGPLAHTVEDFWRMIWEWKSHTIVMLTEVQEREQDKCYQYWPTEGSVTHGEITIEIKNDTL
SEAISIRDFLVTLNQPQARQEEQVRVVRQFHFHGWPEIGIPAEGKGMIDLIAAVQKQQQQTGNHPITVHC
SAGAGRTGTFIALSNILERVKAEGLLDVFQAVKSLRLQRPHMVQTLEQYEFCYKVVQDFIDIFSDYANFK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6126_f11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006504

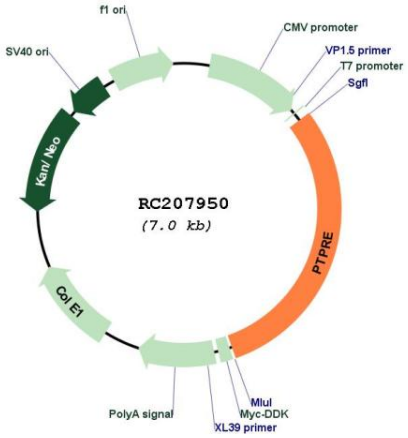
ORF Size: 2100 bp

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

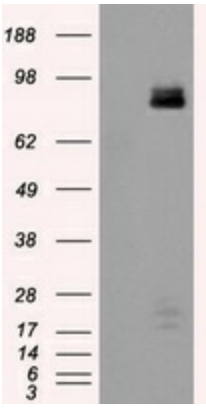
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_006504.6
RefSeq Size:	5392 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
MW:	80.6 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. 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+ channels. [provided by RefSeq, Oct 2015]

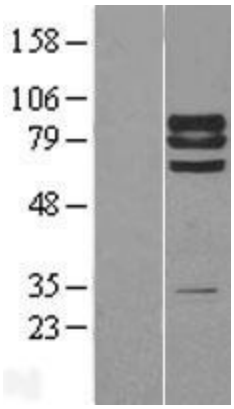
Product images:



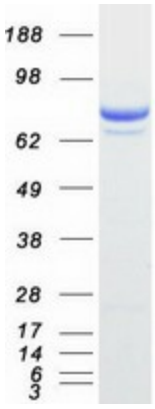
Circular map for RC207950



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PTPRE (Cat# RC207950, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTPRE(Cat# [TA501028]). Positive lysates [LY401950] (100ug) and [LC401950] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401950]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207950 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPRE protein (Cat# [TP307950]). The protein was produced from HEK293T cells transfected with PTPRE cDNA clone (Cat# RC207950) using MegaTran 2.0 (Cat# [TT210002]).