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Product datasheet for SC109676

PTP epsilon (PTPRE) (NM_006504) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTP epsilon (PTPRE) (NM_006504) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTP epsilon
Synonyms:	HPTPE; PTPE; R-PTP-EPSILON
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF sequence for NM_006504 edited
CGGCCGCGAAATTCGGCACGAGGCCTCGTGCCGAATTCGGCACGAGGGGAATACTCAGTA
AATGATGTATTGCCTTTCGCATCAGTAGCCTGCTTGGAAATGTTCAAATTATCAGCCCAG
GAGACTCCAGTGCTGTGGACATGGGTCTGAACGAATTGATCACCTAGGGGCTACTGAGAA
CGCGGTGCTCTGTCCACCATGGAGCCCTTGTGTCCACTCCTGCTGGTGGGTTTTAGCTTG
CCGCTCGCCAGGGCTCTCAGGGGCAACGAGACCACTGCCGACAGCAACGAGACAACCACG
ACCTCAGGCCCTCCGGACCCGGGCGCCTCCCAGCCGCTGCTGGCCTGGCTGCTACTGCCG
CTGCTGCTCCTCCTCCTCGTGCTCCTTCTCGCCGCCTACTTCTTCAGGTTCAGGAAGCAG
AGGAAAGCTGTGGTCAGCACCAGCGACAAGAAGATGCCCAACGGAATCTTGGAGGAGCAA
GAGCAGCAAAGGGTGATGCTGCTCAGCAGGTCACCCTCAGGGCCCAAGAAGTATTTTCCC
ATCCCCGTGGAGCACCTGGAGGAGGAGATCCGTATCAGATCCGCCGACGACTGCAAGCAG
TTTCGGGAGGAGTTCAACTCATTGCCATCTGGACACATACAAGGAACTTTTGAACTGGCA
AATAAAGAAGAAAACAGAGAAAAAAACAGATATCCCAACATCCTTCCCAATGACCATTCT
AGGGTGATTCTGAGCCAACTGGATGGAATTCCCTGTTCAGACTACATCAATGCTTCCTAC
ATAGATGGTTACAAAGAGAAGAATAAATTCATAGCAGCTCAAGGTCCCAAACAGGAAACG
GTTAACGACTTCTGGAGAATGGTCTGGGAGCAAAAGTCTGCGACCATCGTCATGTTAACA
AACTTGAAAGAAAGGAAAGAGGAAAAGTGCCATCAGTACTGGCCCGACCAAGGCTGCTGG
ACCTATGGAAACATCCGGGTGTGCGTGGAGGACTGCGTGGTTTTGGTCGACTACACCATC
CGGAAGTTCTGCATACAGCCACAGCTCCCCGACGGCTGCAAAGCCCCCAGGCTGGTCTCA
CAGCTGCACTTCACCAGCTGGCCCGACTTCGGAGTGCCTTTTACCCCCATTGGGATGCTG
AAGTTCCTCAAGAAAGTAAAGACGCTCAACCCCGTGCACGCTGGGCCCATCGTGGTCCAC
TGTAGCGCGGGCGTGGGCCGGACGGGCACCTTCATTGTGATCGATGCCATGATGGCCATG
ATGCACGCGGAGCAGAAGGTGGATGTGTTTGAATTTGTGTCTCGAATCCGTAATCAGCGC
CCTCAGATGGTTCAAACGGATATGCAGTACACGTTCATCTACCAAGCCTTACTCGAGTAC
TACCTCTACGGGGACACAGAGCTGGACGTGTCCTCCCTGGAGAAGCACCTGCAGACCATG
CACGGCACCACCACCCACTTCGACAAGATCGGGCTGGAGGAGGAGTTCAGGAAATTGACA
AATGTCCGGATCATGAAGGAGAACATGAGGACGGGCAACTTGCCGGCAAACATGAAGAAG
GCCAGGGTCATCCAGATCATCCCGTATGACTTCAACCGAGTGATCCTTTCCATGAAAAGG
GGTCAAGAATACACAGACTACATCAACGCATCCTTCATAGACGGCTACCGACAGAAGGAC
TATTTCATCGCCACCCAGGGGCCACTGGCACACACGGTTGAGGACTTCTGGAGGATGATC
TGGGAATGGAAGTCCCACACTATCGTGATGCTGACGGAGGTGCAGGAGAGAGAGCAGGAT
AAATGCTACCAGTATTGGCCAACCGAGGGCTCAGTTACTCATGGAGAAATAACGATTGAG
ATAAAGAATGATACCCTTTCAGAAGCCATCAGTATACGAGACTTTCTGGTCACTCTCAAT
CAGCCCCAGGCCCGCCAGGAGGAGCAGGTCCGAGTAGTGCGCCAGTTTCACTTCCACGGC
TGGCCTGAGATCGGGATTCCCGCCGAGGGCAAAGGCATGATTGACCTCATCGCAGCCGTG
CAGAAGCAGCAGCAGCAGACAGGCAACCACCCCATCACCGTGCACTGCAGTGCCGGAGCT
GGGCGAACAGGTACATTCATAGCCCTCAGCAACATTTTGGAGCGAGTAAAAGCCGAGGGA
CTTTTAGATGTATTTCAAGCTGTGAAGAGTTTACGACTTCAGAGACCACATATGGTGCAA
ACCCTGGAACAGTATGAATTCTGCTACAAAGTGGTACAAGATTTTATTGATATATTTTCT
GATTATGCTAATTTCAAATGAAGATTCCTGCCTTAAAATATTTTTTTAATTTAATGGTCA
GTATATTTTGTAAAAATCATGTTAATTTATTTCATAGTTGACATTAATATCTTCCCTAAT
TTCTTTGTATATATTTTGTTATGCCTTAAAGGCCACCTGCTATACAGTTGTTAAATCTTA
AATATGCTTTTTAAAAATTGGATAATGTATTAAGGTCAAATAATATCCCATAAAATATAT
ATTTCTGCTAATATTA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006504 unedited
CTTGGGCCGGGCCTCGTGCCTTTTGGGGACGAGGGGNAATACTCAGTAAATGATGTATTG
CCTTTCGCATCAGTAGCCTGCTTGGAAATGTTCAAATTATCAGCCCAGGAGACTCCAGTG
CTGTGGACATGGGTCTGAACGAATTGATCACCTAGGGAGCTACTAGAAAACTCGGCTGCG
CTGTCCACCATGGAGCCCTTGTGTCCACTCCTGCTGGTGGGTTTTAGCTTGCCGCTCGCC
AGGGCTCTCAGGGGCAACGAGACCACTGCCGACAGCAACGAGACAACCACGACCTCAGGC
CCTCCGGACCCGGGCGCCTCCCAGCCGCTGCTGGCCTGGCTGCTACTGCCGCTGCTGCTC
CTCCTCCTCGTGCTCCTTCTCGCCGCCTACTTCTTCAGGTTCAGGAAGCAGAGGAAAGCT
GTGGTCAGCACCAGCGACAAGAAGATGCCCAACGGAATCTTGGAGGAGCAAGAGCAGCAA
AGGGTGATGCTGCTCAGCAGGTCACCCTCAGGGCCCAAGAAGTATTTTCCCATCCCCGTG
GAGCACCTGGAGGAGGAGATCCGTATCAGATCCGCCGACGACTGCAAGCAGTTTCGGGAG
GAGTTCAACTCATTGCCCTCTGGACACATACAAGGAACTTTTGAACCTGGCAATTACGAA
GAAAACAGAGGAAAAAACAGATATCCCAACATCCTTTCAAAAGACCATTCTAGGGTGATC
CTGAGCCAACTGGATGGAATTCCCTGTTCAGACTACATCAATGCTTCCCACTAGATGGTT
ACAAAGAGGAAAATAAATTCCTAGCAGCCTAAGGTCCCAAACAGAAAACGGTAACGACTC
CTGAAAATGGTCCCGGGAGCAAAATCTGCGACCTTCGTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006504 unedited
NTTTCACTCTGGACCCGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTC
CCCGTCAGTCAATCTTATCTGGTAATGGGATCATTACTGTTATCCAGTGTCAATGGTCTC
AGTAGTATTTCCATTCAAAAATAATTTAGCTTTTAAATTAAGGATTTCTCTTTTTGTTTT
ATTAAACATTGAAAGGTGGGACTTTAAAAAATGGTATAAATCTAGATTTTAAGGATTCTT
TTCTTACAAACTGTCTCAGCTTTTTACAAGAAATGTTTAAATACCAAAATGCTGCTCAGA
AAATTTAAAGTTTAATTGCCCGTGGTTATTCTACTGTTTCTATCCTAATGTGTGCTCCTC
TGTACTGCGTGTGTAAGACGCTCAGTTCATCTGAATGTTTGGATGGGAAGTTTTGTGTTG
AGCCTCCAGGCATAGCACTGGACCAGCCCAGGCCGCTGTGGCAAAACGGGAGGGGAGAAT
GGGAGAGGCAGCTGGTTTTTTTCTGAGGGTGGTCTGGGCCAAACGACAGGCAGCTGGACA
GCAAATGGTGCTTTGGGGTGTAACTCCGATGGCTGGTTTTGTTGTACCCAACGCCGTGGG
TCAACGGGACCACCCAGCATTTACATCTCTTCTCGTTCAGCCAAGATAGTGTAAACACAG
TCTTGATGGTGTAGACACAGCATTTTAAAATATTATTTATAGTCACCAGCTACTCTAGTG
TGTTTTAGACCTGGATTCAGGTTGTAAAGACTTCTTTGATCTTTAAATGTAAAGATAAAC
CACATGGACCCGAAACTGAGAACTNTACACGAGTCCCCATTTACATTGTACCATCACGAA
CAGTTTGCCTTCCAAAATGCTGCTGGTCAGGGTTGTGATCCACTGCTAGGAAAGGCCATT
TCGCACTGACTTTTGAGTTTTAACCGTTTTCT

Restriction Sites: NotI-NotI

ACCN: NM_006504

Insert Size: 3460 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_006504.3, NP_006495.1
RefSeq Size:	5376 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
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] Transcript Variant: This variant (1) lacks a 5' exon compared to variant 3. The resulting isoform (1) is shorter at the N-terminus compared to isoform 3. The encoded protein is a receptor type isoform of this PTP. Variants 1, 4, and 5 all encode the same isoform (1).