

## Product datasheet for **SC128004**

### PTPN7 (NM\_080588) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPN7 (NM_080588) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTPN7
Synonyms:	BPTP-4; HEPTP; LC-PTP; LPTP; PTPNI
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_080588, the custom clone sequence may differ by one or more nucleotides

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ATGGGAGCCTCCTTCTGGCCAATCAGGCAGGCCAGAGAACAGCAGCGGAGGGCCCTGTCTTTCAGGCAGA  
CCTCATGGCTGAGTGAGCCTCCCCTGGGCCAGCACCCACCTCAGCATGGTCCAAGCCCATGGGGGCG  
CTCCAGAGCACAGCCGTTGACCTTGTCTTTGGGGCAGCCATGACCCAGCCTCCGCCTGAAAAACGCCA  
GCCAAGAAGCATGTGCGACTGCAGGAGAGGGGGCTCCAATGTGGCTCTGATGCTGGACGTTTCGGTCCC  
TGGGGGCCGTAGAACCCTCTGCTCTGTGAACACACCCCGGGAGGTCACCCTACACTTTCTGCGCACTGC  
TGGACACCCCTTACCCGCTGGGCCCTTACGCGCCAGCCACCCAGCCCAAGCAACTGGAAGAAGAATTC  
TTGAAGATCCCTTCAAATTTGTGAGCCCGAAGACCTGGACATCCCTGGCCACGCTCCAAGGACCGAT  
ACAAGACCATCTTGCCAAATCCCCAGAGCCGTGTCTGTCTAGGCCGGGCACAGAGCCAGGAGGACGGAGA  
TTACATCAATGCCAACTACATCCGAGGCTATGACGGGAAGGAGAAGGTCTACATTGCCACCCAGGGCCCC  
ATGCCAACACTGTGTCGGACTTCTGGGAGATGGTGTGGCAAGAGGAAGTGTCCCTCATTGTGCTGCTCA  
CTCAGTCCGAGAGGGCAAGGAGAAATGTGTCCACTACTGGCCACAGAAGAGGAAACCTATGGACCCCT  
CCAGATCCGCATCCAGGACATGAAAGAGTGCACAGAATACTGTGCGGCAGCTCACCATCCAGTACCAG  
GAAGAGCGCCGGTCAGTAAAGCACATCCTTTTTCGGCCCTGGCCAGACCATCAGACACCAGAAATCAGCTG  
GGCCCTGCTGCGCCTAGTGGCAGAGGTGGAGGAGAGCCCGGAGACAGCCGCCACCCCGGGCCTATCGT  
AGTCCACTGCAGTGCAGGATTGGCCGGACGGGCTGCTTCATCGCCACGCGAATTGGCTGTCAACAGCTG  
AAAGCCCAGGAGAAGTGGACATTCTGGGTATTGTGTGCCAACTGCGGCTAGACAGAGGGGGGATGATCC  
AGACGGCAGAGCAGTACCAGTTCCTGCACCACACTTTGGCCCTGTATGCAGGCCAGCTGCCTGAGGAACC  
CAGCCCTGA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_080588 unedited TTNNGNCCTTGTACATTTGTATACGACTCACTATAGGCGGCACGCGATTCTTCTTCCG TTGCTTGGGGCTGGGTGGCTGGCGCTGAAGGGCCAGCGGGTAAGGGGTGTCCAGCAGT GCGCAGAAAGTGTAGGGTGACCTCCCGGGTGTGTTACACAGAGCAGATGGGTTCTACGGC CCCCAGGACCGAACGTCCAGCATCAGAGCCACATTGGAGCCCCGCCTCTCTGCAGTCG CACATGCTTCTTGGCTGGCGTTTTTTCAGGCGGAGGCTGGGTGATGGCTGCCCCAAAGA CAAGGTCAACGGCTGTGCTCTGGAGCGCCCCCATGGGCTTGGACCATGCTGAGGTGGG TGCTGGGCCAGGGGAGGCTCACTCAGCCATGAGGTCTGCCTGAAAGACAGGGCCCTCCG CTGCTGTTCTCTGGCCTGCCTGATTGGCCAGAAGGAGGCTCCCATGCCAGGCCAGGTTTG CACTCTGTTTTCACTGGGGCGTCTTCTGTTCCCAAGAGGTGGCCTCATTTTCACTAAGG GAAGGACAGGATCTATTTGGTGGGACCCAGGGCAGAAGGCAGTCTCGGGGTAGAGTAACG GCAAGATAAAGGGTAGAGATTGTGGATGAAGATAGGAAAGAATCCAGAAGGAGGAAAAGA GAGAGGGGAGAGAGGCCACACACCAGAGTACACAGGGCTCTGAGCAGGTCCAAGTGGGAT GAGGCAAGGGAGGAAAACAGAAAATATGTGTTCTCTAGGACGGAAGGGAGAAAGCACGCAG GAGCCATCTCTGAGCTAACCAGTGGGCCTTCCCCTGAACAGAGAATGGATGCCTCCANCA GTGTTG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_080588
<b>Insert Size:</b>	2700 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_080588.1</a></u> , <u><a href="#">NP_542155.1</a></u>
<b>RefSeq Size:</b>	3263 bp
<b>RefSeq ORF:</b>	1200 bp
<b>Locus ID:</b>	5778
<b>UniProt ID:</b>	<u><a href="#">P35236</a></u>
<b>Cytogenetics:</b>	1q32.1
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>Protein Pathways:</b>	MAPK signaling pathway

**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 gene is preferentially expressed in a variety of hematopoietic cells, and is an early response gene in lymphokine stimulated cells. The non-catalytic N-terminus of this PTP can interact with MAP kinases and suppress the MAP kinase activities. This PTP was shown to be involved in the regulation of T cell antigen receptor (TCR) signaling, which was thought to function through dephosphorylating the molecules related to MAP kinase pathway. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2010]

**Transcript Variant:** This variant (2) lacks an exon from the 5' end and contains an alternate 5' segment which includes an AUG start codon, as compared to variant 1. The resulting isoform (2) has a shorter and distinct N-terminus, as compared to isoform 1.

**Sequence Note:** This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.