

Product datasheet for **SC109065**

DPP1 (CTSC) (NM_148170) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DPP1 (CTSC) (NM_148170) Human Untagged Clone
Tag:	Tag Free
Symbol:	DPP1
Synonyms:	CPPI; DPP-I; DPP1; DPPI; HMS; JP; JPD; PALS; PDON1; PLS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_148170, the custom clone sequence may differ by one or more nucleotides

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ATGGGTGCTGGGCCCTCCTTGCTGCTCGCCGCCCTCCTGCTGCTTCTCTCCGGCGACGGCGCGTGCCT  
GCGACACACCTGCCAACTGCACCTATCTTGACCTGCTGGGCACCTGGGTCTTCCAGGTGGGCTCCAGCGG  
TTCCCAGCGCGATGTCAACTGCTCGGTTATGGGACCACAAGAAAAAAGTAGTGGTGTACCTTCAGAAG  
CTGGATACAGCATATGATGACCTTGCAATTCTGGCCATTTACCATCATTTACAACCAAGGCTTTGAGA  
TTGTGTTGAATGACTACAAGTGGTTTGCCTTTTTAAGGATGTCCTGATTTTATCAGTCATTTGTTTCAT  
GCAGCTGGGAAGTGGGGATATGATTTGCCACATCTGAGGAACAACTGGTTATTAATAG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_148170 unedited
 CTTAGATTTGTAACGACTCACTATAGGCGGCCGGAATTCGCACGAGGTCTTCACCTCT
 TTTCTCAGCTCCCTGCAGCATGGGTGCTGGGCCCTCCTTGCTGCTCGCCGCCCTCCTGCT
 GCTTCTCTCCGGCGACGGCGCCGTGCGCTGCGACACACCTGCCAACTGCACCTATCTTGA
 CCTGCTGGGCACCTGGGTCTTCCAGGTGGGCTCCAGCGGTTCCAGCGCATGTCAACTG
 CTCGGTTATGGGACCACAAGAAAAAAGTAGTGGTGTACCTTCAGAAGCTGGATACAGC
 ATATGATGACCTTGGCAATTCTGGCCATTTACCATCATTACAACCAAGGCTTTGAGAT
 TGTGTTGAATGACTACAAGTGGTTTGCCTTTTTAAGGATGTCACTGATTTTATCAGTCA
 TTTGTTTATGCAGCTGGGAACTGTGGGATATATGATTTGCCACATCTGAGGAACAAACT
 GGTATTAAATAGAGCATCTGTTGAGGGACTCTTTAAAACCACAGCCATGAACAGACGT
 TGGGGCTAAGAGACAGAGCAGCCTGCGACAGTGTGGACCTACCTGTAGCAGCTAGCAAAG
 GCCTCTAGCAGCTACAGTCCCTTCTGGAGTCTTATTTGCATGCAAAATGCAAAGGAGTC
 CTGGTGACCTACCTCAAGGCAGCTGCCCTCCTGAACACTCCCTTGAAAAACAGTAAACA
 TCATTTTGAATGTGAACAACCAGAGACTACACAGGAGAAAGGAAAAAATTTCTGAA
 GATGCAAAATCTTGGGTGGCTTACCGTTCAGTTTTTAAATAAAGGAACAATNTACANA
 AAAAAANAAAACTCGACTCTAGATTGCNGCCGCGGTATAGCTGTTTCTGAACAGA
 TCCCGNTGGCATNCTGTGNACCTNNCCATGCCTNTNCTGGCCCTGNAAGTGCCACT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_148170 unedited
 TAACTATGNAACCGCGCCGCATNCTAGNGATCGATTTTTTTTTTTTTTTTTTTGTATATT
 GTTCTTTTATTAAAAACTGAACGGTGAAGCCACCCAAAATTTGCATCTTCAGAATTT
 TTTTTTCTTTCTCCTGTGTAGTCTCTGGTTGTTTACATTCCAAAATGATGTTTACTGT
 TTTCCAAGGGAGTTCAGGAGGCAGCTGCCTTGGAGGTAGGTCACCAGGACTCCTTTG
 CATTTTGCATGCAATAAAGACTCCAGAAGGGACTGTAGCTGCTAGAGGCCTTTGCTAGC
 TGCTACAGGTAGGTCCACACTGTCGCAGGCTGCTCTGTCTTTAGCCCCAACGTCTGTTC
 ATGGCTGTGGTTTTAAAAGAGTCCCTCAACAGATGCTCTATTTAATAACCAAGTTTGTTC
 TCAGATGTGGCAAATCATATATCCACAGTTCACAGTGCATGAACAAATGACTGATAA
 AATCAGTGACATCCTTAAAAAGGCAAACCACTTGTAGTCATTCAACACAATCTCAAAGC
 CTTGGTTGTAATGATGGTGAATGGCCAGAATTGCCAAGGTATCATATGCTGTATCCA
 GCTTCTGAAGGTACACCACTACTTTTTTTCTTGTGGTCCATAACCGAGCAGTTGACAT
 CGCGCTGGGAACCGCTGGAGCCACCTGGAAGACCCCAAGTGCACAGCAAGTCAAGAAATAG
 TGCAAGTTGGCAAGTGTGTCGAACCAACCGCGCCGTCGCCGAAAAAACCAAGGAGGCGG
 CCAGCACCAAGGAGGGCCACCACCCTGCTGCAGGGAGCTGAAAAAAGTGAAGACCTT
 CTGCCAAATTCGGCCGCCCTATATTGAGTCGTATACCAAAATTTGACGGTTCACTAAC
 GAGCTCTGCTTATTAGACCTCCAACCTACCACCTACCC

Restriction Sites:

NotI-NotI

ACCN:

NM_148170

Insert Size:

800 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_148170.2](#), [NP_680475.1](#)

RefSeq Size: 6131 bp

RefSeq ORF: 414 bp

Locus ID: 1075

UniProt ID: [P53634](#)

Cytogenetics: 11q14.2

Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome

Gene Summary: This gene encodes a member of the peptidase C1 family and lysosomal cysteine proteinase that appears to be a central coordinator for activation of many serine proteinases in cells of the immune system. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate heavy and light chains that form a disulfide-linked dimer. A portion of the propeptide acts as an intramolecular chaperone for the folding and stabilization of the mature enzyme. This enzyme requires chloride ions for activity and can degrade glucagon. Defects in the encoded protein have been shown to be a cause of Papillon-Lefevre syndrome, an autosomal recessive disorder characterized by palmoplantar keratosis and periodontitis. [provided by RefSeq, Nov 2015]

Transcript Variant: This variant (2) differs in the coding sequence and 3' UTR compared to variant 1. This results in an isoform (b) that is much shorter and contains a different C-terminus than isoform a. Isoform b may act as a negative regulator of a stable mature enzyme. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The extent of this transcript is supported by transcript alignments.