

## **Product datasheet for SC318774**

## OriGene Technologies, Inc.

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## DPP1 (CTSC) (NM\_001114173) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: DPP1 (CTSC) (NM 001114173) Human Untagged Clone

Tag: Tag Free Symbol: DPP1

Synonyms: CPPI; DPP-I; DPP1; DPPI; HMS; JP; JPD; PALS; PDON1; PLS

**Vector:** <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001114173, the custom clone sequence may differ by one or

more nucleotides

GGC

**Restriction Sites:** Please inquire **ACCN:** NM\_001114173

**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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.

**RefSeg:** NM 001114173.1, NP 001107645.1

 RefSeq Size:
 6099 bp

 RefSeq ORF:
 426 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 (3) differs in the coding sequence and 3' UTR compared to variant 1. This results in an isoform (c) that is much shorter and contains a different C-terminus than isoform a. 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.