

## Product datasheet for RC225118

### DPP1 (CTSC) (NM\_001114173) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** DPP1 (CTSC) (NM\_001114173) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** DPP1  
**Synonyms:** CPPI; DPP-I; DPP1; DPPI; HMS; JP; JPD; PALS; PDON1; PLS  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC225118 representing NM\_001114173  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGTGCTGGGCCCTCCTTGCTGCTCGCCGCCCTCCTGCTGCTTCTCTCCGGCGACGGCGCCGTGCGCT  
 GCGACACACCTGCCAACTGCACCTATCTTGACCTGCTGGGCACCTGGGTCTTCCAGGTGGCTCCAGCGG  
 TTCCAGCGCGATGTCAACTGCTCGTTATGGGACCACAAGAAAAAAGTAGTGGTGTACCTTCAGAAG  
 CTGGATACAGCATATGATGACCTTGCCAATTCTGGCCATTCACCATCATTTACAACCAAGGCTTTGAGA  
 TTGTGTTGAATGACTACAAGTGGTTTGCCTTTTTAAGGATGTCCTGATTTTATCAGTCATTTGTTTCAT  
 GCAGCTGGGAAGTGTGGGATATATGATTTGCCACATCTGAGGAACAACTGGCCATGAACAGACGTTGG  
 GGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC225118 representing NM\_001114173  
 Red=Cloning site Green=Tags(s)

MGAGPSLLLAALLLLLSGDGAVRCDTPANCTYLDLLGTWVFQVGSQSRDVNCSVMGPQEKKVVVYLQK  
 LDYAYDDLGNHFTIIYNQGFIVLNDYKWFVAFKDVTDVFISHLFMQLGTVGIYDPLPHLRNKLAMNRRW  
 G

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_001114173

**ORF Size:** 423 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\\_001114173.3](#)

**RefSeq ORF:** 426 bp

**Locus ID:** 1075

**UniProt ID:** [P53634](#)

**Cytogenetics:** 11q14.2

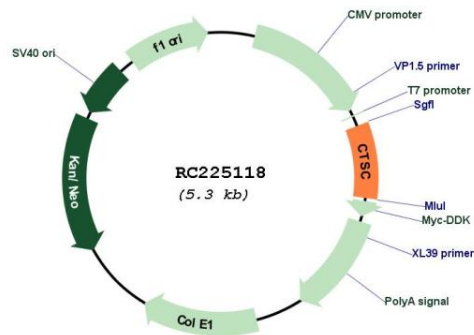
**Protein Families:** Druggable Genome, Protease

**Protein Pathways:** Lysosome

**MW:** 15.7 kDa

**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]

### Product images:



Circular map for RC225118