

Product datasheet for RG215614

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

DPP1 (CTSC) (NM 148170) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DPP1 (CTSC) (NM_148170) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: DPP1

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

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG215614 representing NM_148170

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG215614 representing NM_148170

Red=Cloning site Green=Tags(s)

MGAGPSLLLAALLLLLSGDGAVRCDTPANCTYLDLLGTWVFQVGSSGSQRDVNCSVMGPQEKKVVVYLQK LDTAYDDLGNSGHFTIIYNQGFEIVLNDYKWFAFFKDVTDFISHLFMQLGTVGIYDLPHLRNKLVIK

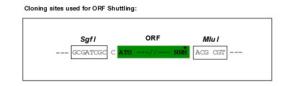
TRTRPLE - GFP Tag - V

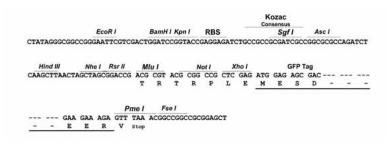
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





ACCN: NM_148170

ORF Size: 411 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: <u>NM 148170.5</u>

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

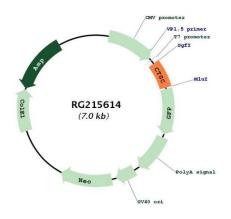
that appears to be a central coordinator for activation of many serine proteinases in cells of the immune system. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate heavy and light

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]

Product images:



Circular map for RG215614