

Product datasheet for RC208931

PTPLAD1 (HACD3) (NM_016395) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPLAD1 (HACD3) (NM_016395) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPLAD1
Synonyms:	B-IND1; BIND1; HSPC121; PTPLAD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208931 representing NM_016395 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGAGAATCAGGTGTTGACGCCGATGTCTACTGGGCTCAGCGACACCGCGAGCTATATCTGCGCGTGG
 AGCTGAGTGACGTACAGAACCTGCCATCAGCATCACTGAAAACGTGCTGCATTTCAAAGCTCAAGGACA
 TGGTGCCAAAGGAGACAATGTCTATGAATTTACCTGGAGTTCTTAGACCTTGTAACCAGAGCCTGTT
 TACAACTGACCCAGAGGCAGGTAAACATTACGTACAGAAGAAAGTGAGTCAGTGGTGGGAGAGACTCA
 CAAAGCAGGAAAAGCGACCACTGTTTTGGCTCCTGACTTTGATCGTTGGCTGGATGAATCTGATCGGA
 AATGGAGCTCAGAGCTAAGGAAGAAGAGCGCCTAAATAAACTCCGACTGGAAAGCGAAGGCTCTCCTGAA
 ACTCTTACAACTTAAGGAAAGGATACCTGTTTATGTATAATCTTGTCGAATCTTGGGATTCTCCTGGA
 TCTTTGTCAACCTGACTGTGCGATTCTGTATCTTGGGAAAAGAGTCCTTTATGACACATTCCATACTGT
 GGCTGACATGATGATTTCTGCCAGATGCTGGCAGTTGTGGAACTATCAATGCAGCAATTGGAGTCACT
 ACGTCACCGGTGCTGCCTTCTCTGATCCAGCTTCTTGAAGAAATTTATTTTGTATCATCTTTGGCA
 CCATGGAAGAAATGCAGAACAAAGCTGTGGTTTTCTTTGTGTTTTATTTGTGGAGTGCAATTGAAATTT
 CAGGTACTCTTTCTACATGCTGACGTGCATTGACATGGATTGGAAGGTGCTCACATGGCTTCGTTACACT
 CTGTGGATTCCCTTATATCCACTGGGATGTTTGGCGGAAGCTGTCTCAGTGATTGAGTCCATTCCAATAT
 TCAATGAGACCGGACGATTGATTTTACATTGCCATATCCAGTGAAAATCAAAGTTAGATTTTCCTTTTT
 TCTTCAGATTTATCTTATAATGATATTTTAGGTTTATACATAAATTTTCGTCACCTTTATAAACAGCGC
 AGACGGCGCTATGGACAAAAAAGAAAAAGATCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

Protein Sequence: >RC208931 representing NM_016395
 Red=Cloning site Green=Tags(s)

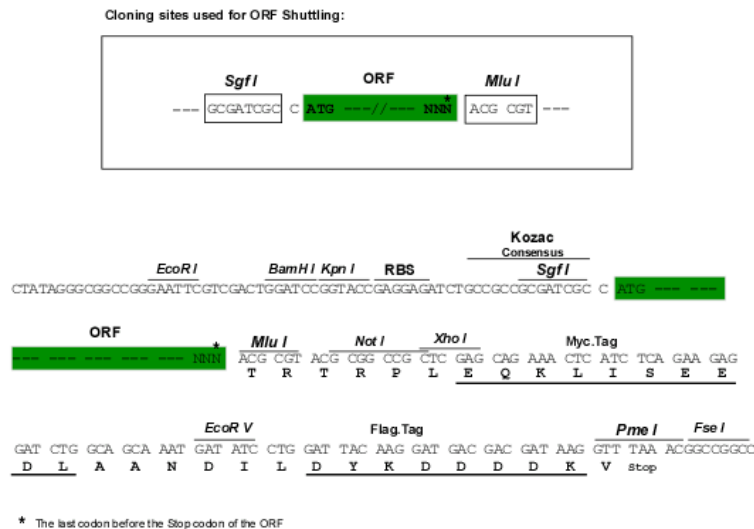
MENQVLTPHVVYAQRHRELYLRVELSDVQNPAISITENVLHFKAQGHGAKGDNVYEFHLEFLDLVKPEPV
 YKLTQRQVNITVQKKVSQWVERLTKQEKRPLFLAPDFDRWLDESDAEMELRAKEEERLNKLRLSEGSPE
 TLTNLRKGYLFMYNLVQFLGFSWIFVNLTVRFCLGKESFYDTFHTVADMMYFCQMLAVVETINAAIGVT
 TSPVLP SLIQLLGRNFILFIIFGTMEEMQNKAVVFFVFLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYT
 LWIPLYPLGCLAEAVSVIQSIPIFNETGRFSFTLPYPVKIKVRF SFFLQIYLIMIFLGLYINFRHLYKQR
 RRRYGQKKKKIH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1560_b05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016395

ORF Size: 1086 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_016395.4](#)

RefSeq Size: 3213 bp

RefSeq ORF: 1089 bp

Locus ID: 51495

UniProt ID: [Q9P035](#)

Cytogenetics: 15q22.31

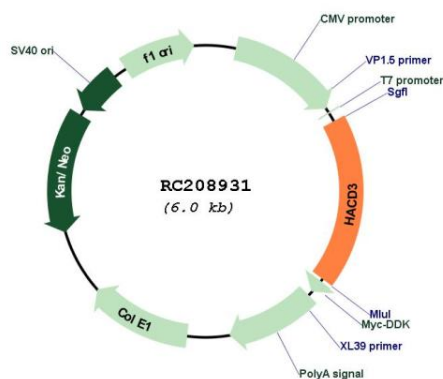
Domains: PTPLA

Protein Families: Transmembrane

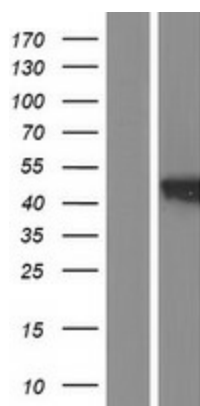
MW: 43 kDa

Gene Summary: Catalyzes the third of the four reactions of the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process, allows the addition of two carbons to the chain of long- and very long-chain fatty acids/VLCFAs per cycle. This enzyme catalyzes the dehydration of the 3-hydroxyacyl-CoA intermediate into trans-2,3-enoyl-CoA, within each cycle of fatty acid elongation. Thereby, it participates in the production of VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May be involved in Rac1-signaling pathways leading to the modulation of gene expression. Promotes insulin receptor/INSR autophosphorylation and is involved in INSR internalization (PubMed:25687571).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC208931



Western blot validation of overexpression lysate (Cat# [LY413995]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208931 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).