

Product datasheet for **RG208931**

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:	TurboGFP
Symbol:	PTPLAD1
Synonyms:	B-IND1; BIND1; HSPC121; PTPLAD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208931 representing NM_016395 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAATCAGGTGTTGACGCCGATGTCTACTGGGCTCAGCGACACCGCGAGCTATATCTGCGCGTGG
AGCTGAGTGACGTACAGAACCCTGCCATCAGCATCACTGAAAACGTGCTGCATTTCAAAGCTCAAGGACA
TGGTGCCAAAGGAGACAATGTCTATGAATTTACCTGGAGTCTTAGACCTTGTAACCAGAGCCTGTT
TACAACTGACCCAGAGGCAGGTAACATTACAGTACAGAAGAAAGTGAGTCAGTGGTGGGAGAGACTCA
CAAAGCAGGAAAAGCGACCACTGTTTTGGCTCCTGACTTTGATCGTTGGCTGGATGAATCTGATGCGGA
AATGGAGCTCAGAGCTAAGGAAGAAGAGCGCCTAAATAAACTCCGACTGGAAAGCGAAGGCTCTCCTGAA
ACTCTTACAACTTAAGGAAAGGATACCTGTTTATGTATAATCTTGTGCAATTCTTGGGATTCTCCTGGA
TCTTTGTCAACCTGACTGTGCGATTCTGTATCTTGGGAAAAGAGTCTTTTATGACACATTCCTACTGT
GGCTGACATGATGATTTCTGCCAGATGCTGGCAGTTGTGGAAATATCAATGCAGCAATTGGAGTCACT
ACGTCACCGGTGCTGCCTTCTCTGATCCAGTCTTGGAAAGAAATTTATTTGTTTATCATCTTTGGCA
CCATGGAAGAAATGCAGAACAAGCTGTGGTTTTCTTTGTGTTTTATTTGTGGAGTGAATTTGAAATTT
CAGGACTCTTTTACATGCTGACGTGCATTGACATGGATTGGAAGTGCTCACATGGCTTCGTTACACT
CTGTGGATCCCTTATATCCACTGGGATGTTGGCGGAAGTGTCTCAGTGATTAGTCCATTCCAATAT
TCAATGAGACCGGACGATTCAGTTTCACATTGCCATATCCAGTGAAAATCAAAGTTAGATTTTCCTTTTT
TCTTCAGATTTTATCTTATAATGATTTTTAGGTTTATACATAAATTTTCGTCACCTTTATAAACAGCGC
AGACGGCGCTATGGACAAAAAAGAAAAAGATCCAC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208931 representing NM_016395
 Red=Cloning site Green=Tags(s)

MENQVLTPHVVYAQRHRELYLRVELSDVQNPASITENVLHFKAQGHGAKGDNVYEFHLEFLDLVKPEPV
 YKLTQRQVNITVQKKVSQWVERLTKQEKRPFLAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPE
 TLTNLRKGYLFMYNLVQFLGFSWIFVNLTVRFICILGKESFYDTFHTVADMMYFCQMLAVVETINAAIGVT
 TSPVLP SLIQLLGRNFILFIIIFGTMEEMQNKAVVFFVFLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYT
 LWIPLYPLGCLAEAVSVIQSIPIFNETGRFSFTLPYVPKIKVRF SFFLQIYLIMIFLGLYINFRHLYKQR
 RRRYGQKKKKIH

TRTRPLE - GFP Tag - V

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.

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

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 RG208931