

Product datasheet for TL302204

OriGene Technologies, Inc.

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PTPLAD1 (HACD3) Human shRNA Plasmid Kit (Locus ID 51495)

Product data:

Product Type: shRNA Plasmids

Product Name: PTPLAD1 (HACD3) Human shRNA Plasmid Kit (Locus ID 51495)

Locus ID: 51495

Synonyms: B-IND1; BIND1; HSPC121; PTPLAD1

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: HACD3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 51495).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 016395, NM 016395.1, NM 016395.2, BC058912, BC000194, BC009056, BC011443,

BC019873, BC035508, BC047685, NM 016395.4

UniProt ID: Q9P035

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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.





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Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).