

Product datasheet for TR319179

OriGene Technologies, Inc.

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GLTPD1 (CPTP) Human shRNA Plasmid Kit (Locus ID 80772)

Product data:

Product Type: shRNA Plasmids

Locus ID: 80772

Synonyms: GLTPD1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: CPTP - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

80772). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>NM_001029885, NM_030575, NM_001029885.1, BC004366, BC072454, BC098429,</u>

NM_001029885.2

UniProt ID: Q5TA50

Summary: Mediates the intracellular transfer of ceramide-1-phosphate (C1P) between organelle

membranes and the cell membrane. Required for normal structure of the Golgi stacks. Can bind phosphoceramides with a variety of aliphatic chains, but has a preference for lipids with

saturated C16:0 or monounsaturated C18:1 aliphatic chains, and is inefficient with

phosphoceramides containing lignoceryl (C24:0). Plays a role in the regulation of the cellular levels of ceramide-1-phosphate, and thereby contributes to the regulation of phospholipase PLA2G4A activity and the release of arachidonic acid. Has no activity with galactosylceramide, lactosylceramide, sphingomyelin, phosphatidylcholine, phosphatidic acid and ceramide. C1P transfer is stimulated by phosphatidylserine in C1P source vesicles (PubMed:28011644).

Regulates autophagy, inflammasome mediated IL1B and IL18 processing, and pyroptosis, but

not apoptosis (PubMed:29164996).[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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).