

Product datasheet for TR303572

OriGene Technologies, Inc.

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LASS3 (CERS3) Human shRNA Plasmid Kit (Locus ID 204219)

Product data:

Product Type: shRNA Plasmids

Product Name: LASS3 (CERS3) Human shRNA Plasmid Kit (Locus ID 204219)

Locus ID: 204219

Synonyms: ARCI9; LASS3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: CERS3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

204219). 5µg purified plasmid DNA per construct

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

RefSeq: BC028703, NM 001290341, NM 001290342, NM 001290343, NM 178842, NM 178842.1,

NM 178842.2, NM 178842.3, NM 178842.4, NM 001290342.1, NM 001290342.2,

NM 001290343.1, NM 001290341.1, NM 001290341.2, BC028703.1, BC034970, BC034970.1,

BC027616, BC034500

UniProt ID: Q8IU89

Summary: This gene is a member of the ceramide synthase family of genes. The ceramide synthase

enzymes regulate sphingolipid synthesis by catalyzing the formation of ceramides from sphingoid base and acyl-coA substrates. This family member is involved in the synthesis of ceramides with ultra-long-chain acyl moieties (ULC-Cers), important to the epidermis in its role in creating a protective barrier from the environment. The protein encoded by this gene has also been implicated in modification of the lipid structures required for spermatogenesis.

Mutations in this gene have been associated with male fertility defects, and epidermal defects, including ichthyosis. Alternative splicing results in multiple transcript variants

encoding different isoforms. [provided by RefSeq, Aug 2015]

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 <u>custom shRNA service</u>.





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).