

Product datasheet for TR303238

OriGene Technologies, Inc.

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MLSTD2 (FAR1) Human shRNA Plasmid Kit (Locus ID 84188)

Product data:

Product Type: shRNA Plasmids

Product Name: MLSTD2 (FAR1) Human shRNA Plasmid Kit (Locus ID 84188)

Locus ID: 84188

Synonyms: CSPSD; MLSTD2; PFCRD; SDR10E1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: FAR1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

84188). 5µg purified plasmid DNA per construct

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

RefSeq: NM 032228, NM 032228.1, NM 032228.2, NM 032228.4, NM 032228.5, BC017377,

BC017377.2, NM 032228.6

UniProt ID: O8WVX9

Summary: The protein encoded by this gene is required for the reduction of fatty acids to fatty alcohols,

a process that is required for the synthesis of monoesters and ether lipids. NADPH is required as a cofactor in this reaction, and 16-18 carbon saturated and unsaturated fatty acids are the preferred substrate. This is a peroxisomal membrane protein, and studies suggest that the N-terminus contains a large catalytic domain located on the outside of the peroxisome, while the C-terminus is exposed to the matrix of the peroxisome. Studies indicate that the regulation of this protein is dependent on plasmalogen levels. Mutations in this gene have been associated with individuals affected by severe intellectual disability, early-onset epilepsy, microcephaly, congenital cataracts, growth retardation, and spasticity (PMID: 25439727). A pseudogene of this gene is located on chromosome 13. [provided by RefSeq,

Jan 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).