

Product datasheet for TR319186

MCFD2 Human shRNA Plasmid Kit (Locus ID 90411)

Product data:

Product Type: shRNA Plasmids

Product Name: MCFD2 Human shRNA Plasmid Kit (Locus ID 90411)

Locus ID: 90411

Synonyms: F5F8D; F5F8D2; LMAN1IP; SDNSF

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MCFD2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

90411). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001171506, NM 001171507, NM 001171508, NM 001171509, NM 001171510,

NM 001171511, NM 139279, NM 139279.1, NM 139279.2, NM 139279.3, NM 139279.4, NM 139279.5, NM 001171509.1, NM 001171509.2, NM 001171510.1, NM 001171510.2, NM 001171511.1, NM 001171511.2, NM 001171506.1, NM 001171506.2, NM 001171508.1, NM 001171508.2, NM 001171507.1, NM 001171507.2, BC040357, BC040357.2, BC037845,

NM 001171509.3, NM 001171510.3, NM 139279.6

UniProt ID: Q8NI22

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Summary:

This gene encodes a soluble luminal protein with two calmodulin-like EF-hand motifs at its C-terminus. This protein forms a complex with LMAN1 (lectin mannose binding protein 1; also known as ERGIC-53) that facilitates the transport of coagulation factors V (FV) and VIII (FVIII) from the endoplasmic reticulum to the Golgi apparatus via an endoplasmic reticulum Golgi intermediate compartment (ERGIC). Mutations in this gene cause combined deficiency of FV and FVIII (F5F8D); a rare autosomal recessive bleeding disorder characterized by mild to moderate bleeding and coordinate reduction in plasma FV and FVIII levels. This protein has also been shown to maintain stem cell potential in adult central nervous system and is a marker for testicular germ cell tumors. The 3' UTR of this gene contains a transposon-like human repeat element named 'THE 1'. A processed RNA pseudogene of this gene is on chromosome 6p22.1. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Apr 2016]

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).