

Product datasheet for TR303138

OriGene Technologies, Inc.

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MRVI1 Human shRNA Plasmid Kit (Locus ID 10335)

Product data:

Product Type: shRNA Plasmids

Product Name: MRVI1 Human shRNA Plasmid Kit (Locus ID 10335)

Locus ID: 10335

Synonyms: IRAG; JAW1L; MRVI1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MRVI1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

10335). 5µg purified plasmid DNA per construct

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

RefSeq: <u>NM 001098579</u>, <u>NM 001100163</u>, <u>NM 001100167</u>, <u>NM 001206880</u>, <u>NM 001206881</u>,

NM 006069, NM 130385, NM 130385.1, NM 130385.2, NM 130385.3, NM 001100163.1, NM 001100163.2, NM 001100167.1, NM 001100167.2, NM 001098579.1, NM 001098579.2,

NM 001206881.1, NM 001206880.1, NM 006069.2, BC117127, NM 001206881.2,

NM 130385.4, NM 001100163.3, NM 001206880.2, NM 001100167.3

UniProt ID: Q9Y6F6

Summary: This gene is similar to a putative mouse tumor suppressor gene (Mrvi1) that is frequently

disrupted by mouse AIDS-related virus (MRV). The encoded protein, which is found in the membrane of the endoplasmic reticulum, is similar to Jaw1, a lymphoid-restricted protein whose expression is down-regulated during lymphoid differentiation. This protein is a substrate of cGMP-dependent kinase-1 (PKG1) that can function as a regulator of IP3-induced calcium release. Studies in mouse suggest that MRV integration at Mrvi1 induces myeloid leukemia by altering the expression of a gene important for myeloid cell growth and/or differentiation, and thus this gene may function as a myeloid leukemia tumor suppressor gene. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene, and alternative translation start sites, including a non-AUG (CUG) start

site, are used. [provided by RefSeq, May 2011]







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).