

Product datasheet for **TR517314**

Fam49b Mouse shRNA Plasmid (Locus ID 223601)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Fam49b Mouse shRNA Plasmid (Locus ID 223601)
Locus ID:	223601
Synonyms:	0910001A06Rik; AW122079
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Fam49b - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 223601). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC011343 , NM_144846 , NM_144846.1 , NM_144846.2 , NM_144846.3 , NM_144846.4 , NM_144846.5 , NM_001360035 , NM_001360036 , NM_001360037 , NM_001360038
UniProt ID:	Q921M7
Summary:	Negatively regulates RAC1 signaling and RAC1-driven cytoskeletal remodeling (PubMed:31285585). Regulates chemotaxis, cell migration and epithelial polarization by controlling the polarity, plasticity, duration and extent of protrusions. Limits Rac1 mediated activation of the Scar/WAVE complex, focuses protrusion signals and regulates pseudopod complexity by inhibiting Scar/WAVE-induced actin polymerization (By similarity). Protects against Salmonella bacterial infection. Attenuates processes such as macropinocytosis, phagocytosis and cell migration and restrict sopE-mediated bacterial entry (PubMed:31285585). Restricts also infection mediated by Mycobacterium tuberculosis and Listeria monocytogenes (PubMed:31285585). Involved in the regulation of mitochondrial dynamics and oxidative stress (PubMed:29059164).[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 .


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**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).