

Product datasheet for TR503187

OriGene Technologies, Inc.

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Diaph3 Mouse shRNA Plasmid (Locus ID 56419)

Product data:

Product Type: shRNA Plasmids

Product Name: Diaph3 Mouse shRNA Plasmid (Locus ID 56419)

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Synonyms: 4930417P13Rik; Dia2; Diap3; Drf3; mDia2; mKIAA4117; p134MDia2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Diaph3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

56419). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC028920</u>, <u>BC085191</u>, <u>NM 019670</u>, <u>NM 019670.1</u>, <u>BC003250</u>, <u>BC086779</u>, <u>NM 019670.2</u>

UniProt ID: Q9Z207

Summary: Actin nucleation and elongation factor required for the assembly of F-actin structures, such

as actin cables and stress fibers (PubMed:10678165, PubMed:23558171). Required for cytokinesis, stress fiber formation and transcriptional activation of the serum response factor (PubMed:10678165, PubMed:23558171). Binds to GTP-bound form of Rho and to profilin: acts in a Rho-dependent manner to recruit profilin to the membrane, where it promotes actin polymerization (PubMed:10678165). DFR proteins couple Rho and Src tyrosine kinase during signaling and the regulation of actin dynamics (PubMed:10678165). Also acts as an actin nucleation and elongation factor in the nucleus by promoting nuclear actin polymerization inside the nucleus to drive serum-dependent SRF-MRTFA activity (PubMed:23558171).

[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 <u>techsupport@origene.com</u>. 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).