

## **Product datasheet for TL500611**

## **Dmtn Mouse shRNA Plasmid (Locus ID 13829)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Dmtn Mouse shRNA Plasmid (Locus ID 13829)

**Locus ID:** 13829

Synonyms: Al325486; dematin; Epb4.9; Epb49

**Vector:** pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Dmtn - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 13829).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

**RefSeq:** <u>BC016897</u>, <u>BC037021</u>, <u>NM 001252662</u>, <u>NM 001252663</u>, <u>NM 001252664</u>, <u>NM 001252665</u>,

NM 001252666, NM 013514, NM 001360024, NM 001360025, NM 001360026, NM 001360027, NM 001360028, NM 001360029, NM 001360030, NM 013514.1, NM 013514.2, NM 013514.3, NM 013514.4, NM 001252665.1, NM 001252666.1,

NM 001252664.1, NM 001252663.1, NM 001252662.1

UniProt ID: Q9WV69

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Summary:

Membrane-cytoskeleton-associated protein with F-actin-binding activity that induces F-actin bundles formation and stabilization. Its F-actin-bundling activity is reversibly regulated upon its phosphorylation by the cAMP-dependent protein kinase A (PKA). Binds to the erythrocyte membrane glucose transporter-1 SLC2A1/GLUT1, and hence stabilizes and attaches the spectrin-actin network to the erythrocytic plasma membrane. Plays a role in maintaining the functional integrity of PKA-activated erythrocyte shape and the membrane mechanical properties. Plays also a role as a modulator of actin dynamics in fibroblasts; acts as negative regulator of the RhoA activation pathway. In platelets, functions as a regulator of internal calcium mobilization across the dense tubular system that affects platelet granule secretion pathways and aggregation. Also required for the formation of a diverse set of cell protrusions, such as filopodia and lamellipodia, necessary for platelet cell spreading, motility and migration. Acts as a tumor suppressor and inhibits malignant cell transformation. [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 <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).