

Product datasheet for TL316531

OriGene Technologies, Inc.

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Dematin (DMTN) Human shRNA Plasmid Kit (Locus ID 2039)

Product data:

Product Type: shRNA Plasmids

Product Name: Dematin (DMTN) Human shRNA Plasmid Kit (Locus ID 2039)

Locus ID: 2039

Synonyms: DMT; EPB49

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Cell Puromycin

Selection:

Format: Lentiviral plasmids

Components: DMTN - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2039).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC017445</u>, <u>BC052805</u>, <u>NM 001114135</u>, <u>NM 001114136</u>, <u>NM 001114137</u>, <u>NM 001114138</u>,

NM 001114139, NM 001302816, NM 001302817, NM 001978, NM 001323378, NM 001323379, NM 001323380, NM 001323381, NM 001323382, NM 001323384, NM 001323385, NM 001323387, NM 001323388, NM 001323389, NM 001323390, NM 001323391, NM 001323392, NM 001323393, NM 001323394, NM 001323395, NM 001323396, NM 001323397, NM 001323398, NM 001323399,

NM 001323400, NM 001323401, NM 001978.1, NM 001978.2, NM 001978.3, NM 001978.4, NM 001114139.1, NM 001114139.2, NM 001114139.3, NM 001114137.1, NM 001114137.2, NM 001114137.3, NM 001114138.1, NM 001114138.2, NM 001114136.1, NM 001114136.2, NM 001114135.1, NM 001114135.2, NM 001114135.3, NM 001114135.4, NM 001302817.1, NM 001302817.2, NM 001302816.1, NM 001302816.2, BC017445.1, BC052805.1, BC006318,

BC006318.2, BM547218, NM 001302817.3, NM 001302816.3, NM 001114136.3,

NM 001114139.4, NM 001978.5, NM 001114135.5, NM 001114138.3

UniProt ID: Q08495





Summary:

The protein encoded by this gene is an actin binding and bundling protein that plays a structural role in erythrocytes, by stabilizing and attaching the spectrin/actin cytoskeleton to the erythrocyte membrane in a phosphorylation-dependent manner. This protein contains a core domain in the N-terminus, and a headpiece domain in the C-terminus that binds F-actin. When purified from erythrocytes, this protein exists as a trimer composed of two 48 kDa polypeptides and a 52 kDa polypeptide. The different subunits arise from alternative splicing in the 3' coding region, where the headpiece domain is located. Disruption of this gene has been correlated with the autosomal dominant Marie Unna hereditary hypotrichosis disease, while loss of heterozygosity of this gene is thought to play a role in prostate cancer progression. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Nov 2014]

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).