

# **Product datasheet for SC318836**

## OriGene Technologies, Inc.

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### Dematin (DMTN) (NM\_001114139) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Dematin (DMTN) (NM\_001114139) Human Untagged Clone

Tag: Tag Free Symbol: DMTN

Synonyms: DMT; EPB49

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC318836 representing NM\_001114139.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAACGGCTGCAGAAGGCCAAGATGGACAATCAGGTGCTGGCTACAAGGACCTGGCTGCCATCCCC AAGGACAAGGCCATCCTGGACATCGAGCGGCCCGACCTCATGATCTACGAGCCTCACTTCACTTATTCC CCATCCCAGAGGTGTGGGCGGACAGCCGGTCGCCTGGAATCATCTCTCAGGCCTCGGCCCCCAGAACC ACTGGAACCCCCGGACCAGCCTGCCCCATTTCCACCACCCTGAGACCTCCCGCCCAGATTCCAACATC TACAAGAAGCCTCCCATCTATAAGCAGAGAGAGAGTCCGTGGGAGGCAGCCCTCAGACCAAGCACCTCATC GAGGATCTCATCGTCATCCAGCTCAAGTTTCCTGCAGCCCAGCCCCAGACCCAACCAGCCAACAAA ATCGAAACCGACTACTGGCCATGCCCCCCGTCTCTGGCTGTTGTGGAGACAGAATGGAGGAAGCGGAAG GCGTCTCGGAGGGAGCAGAGGAGGAGGAGGAGGAGGAGATGACGACTCTGGAGAGGAGATGAAGGCT CTCAGGGAGCGTCAGAGAGAACTCAGTAAGGTTACTTCCAACTTGGGAAAGATGATCTTGAAAGAA GAGATGGAAAAGTCATTGCCGATCCGAAGGAAAACCCGCTCTCTGCCTGACCGGACACCCTTCCATACC TCCTTGCACCAGGGAACGTCTAAATCTTCCTCTCTCCCCGCCTATGGCAGGACCACCCTGAGCCGGCTA CAGTCCACAGAGTTCAGCCCATCAGGGAGTGAGACTGGAAGCCCAGGCCTGCAGATCTATCCCTATGAA ATGCTAGTGGTGACCAACAAGGGGCGAACCAAGCTGCCACCGGGGGTGGATCGGATGCGGCTTGAGAGG CATCTGTCTGCCGAGGACTTCTCAAGGGTATTTGCCATGTCCCCTGAAGAGTTTTGCCAAGCTGGCTCTG TGGAAGCGGAATGAGCTCAAGAAGAAGGCCTCTCTCTCTGA

**ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

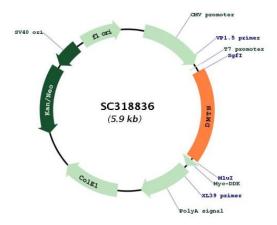
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul





#### Plasmid Map:



**ACCN:** NM\_001114139

**Insert Size:** 1077 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** NM 001114139.3

RefSeq Size: 2518 bp
RefSeq ORF: 1077 bp
Locus ID: 2039



#### Dematin (DMTN) (NM\_001114139) Human Untagged Clone - SC318836

 UniProt ID:
 Q08495

 Cytogenetics:
 8p21.3

 MW:
 40.7 kDa

**Gene Summary:** The protein encoded by this gene is an actin binding and bundling protein that plays a

isoforms. [provided by RefSeq, Nov 2014]

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

Transcript Variant: This variant (6) contains an alternate exon in the 5' UTR and lacks alternate in-frame exons in the 5' and 3' coding regions, compared to variant 1. Variants 6 and 17 encode the same isoform (3), which is shorter than isoform 1.