

Product datasheet for SC318858

OriGene Technologies, Inc.

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Dematin (DMTN) (NM_001114136) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Dematin (DMTN) (NM_001114136) Human Untagged Clone

Tag: Tag Free Symbol: Dematin

Synonyms: DMT; EPB49

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC318858 representing NM_001114136.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAACGGCTGCAGAAGCAACCACTTACCTCCCCGGGAGCGTGAGCCCCTCCCGAGATTCCAGTGTG CCTGGCTCTCCCTCCAGCATCGTGGCCAAGATGGACAATCAGGTGCTGGGCTACAAGGACCTGGCTGCC ATCCCCAAGGACAAGGCCATCCTGGACATCGAGCGGCCCGACCTCATGATCTACGAGCCTCACTTCACT CCCCACCATCCCCAGAGGTGTGGGCGGACAGCCGGTCGCCTGGAATCATCTCTCAGGCCTCGGCCCCC AGAACCACTGGAACCCCCGGACCAGCCTGCCCCATTTCCACCACCCTGAGACCTCCCGCCCAGATTCC AACATCTACAAGAAGCCTCCCATCTATAAGCAGAGAGAGTCCGTGGGAGGCAGCCCTCAGACCAAGCAC CTCATCGAGGATCTCATCGAGTCATCCAAGTTTCCTGCAGCCCAGCCCCCAGACCCCAACCAGCCA GCCAAAATCGAAACCGACTACTGGCCATGCCCCCCGTCTCTGGCTGTTGTGGAGACAGAATGGAGGAAG CGGAAGGCGTCTCGGAGGGGAGCAGAGGAAGAGGAGGAGGAAGATGACGACTCTGGAGAGGAGATG AAGGCTCTCAGGGAGCGTCAGAGAGAGACTCAGTAAGGTTACTTCCAACTTGGGAAAGATGATCTTG AAAGAAGAGATGGAAAAGTCATTGCCGATCCGAAGGAAAACCCGCTCTCTGCCTGACCGGACACCCTTC CATACCTCCTTGCACCAGGGAACGTCTAAATCTTCCTCTCTCCCCGCCTATGGCAGGACCACCCTGAGC CGGCTACAGTCCACAGAGTTCAGCCCATCAGGGAGTGAGACTGGAAGCCCAGGCCTGCAGAACGGAGAG GGCCAGAGGGGGAGGATGGACCGGGGGAACTCCCTGCCCTGTGTGCTGGAGCAGAAGATCTATCCCTAT GAAATGCTAGTGGTGACCAACAAGGGGCGAACCAAGCTGCCACCGGGGGTGGATCGGATGCGGCTTGAG AGGCATCTGTCTGCCGAGGACTTCTCAAGGGTATTTGCCATGTCCCCTGAAGAGTTTGGCAAGCTGGCT

ACGCGTACGCCGCCCCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



Dematin (DMTN) (NM_001114136) Human Untagged Clone - SC318858

ACCN: NM_001114136

Insert Size: 1218 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: <u>NM 001114136.2</u>

 RefSeq Size:
 2526 bp

 RefSeq ORF:
 1218 bp

 Locus ID:
 2039

 UniProt ID:
 Q08495

 Cytogenetics:
 8p21.3

MW: 45.5 kDa

Gene 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]

Transcript Variant: This variant (3) differs in the 5' UTR, compared to variant 1. Variants 1-3 and 9-13 all encode the same isoform (1, also known as the 52 kDa subunit, PMID:7615546).