

Product datasheet for SC318848

OriGene Technologies, Inc.

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Dematin (DMTN) (NM 001114138) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Dematin (DMTN) (NM 001114138) Human Untagged Clone

Tag: Tag Free

Symbol: Dematin

Synonyms: DMT; EPB49 Vector: pCMV6 series

>NCBI ORF sequence for NM_001114138, the custom clone sequence may differ by one or **Fully Sequenced ORF:**

more nucleotides

ATGGAACGGCTGCAGAAGCAACCACTTACCTCCCCGGGAGCGTGAGCCCCTCCCGAGAT TCCAGTGTGCCTGGCTCTCCCTCCAGCATCGTGGCCAAGATGGACAATCAGGTGCTGGGC TACAAGGACCTGGCTGCCATCCCCAAGGACAAGGCCATCCTGGACATCGAGCGGCCCGAC CTCATGATCTACGAGCCTCACTTCACTTATTCCCTCCTGGAACACGTGGAGCTGCCTCGC AGCCGCGAGCGCTCGCTGTCACCCAAATCCACATCCCCCCACCATCCCCAGAGGTGTGG GCGGACAGCCGGTCGCCTGGAATCATCTCTCAGGCCTCGGCCCCCAGAACCACTGGAACC CCCCGGACCAGCCTGCCCCATTTCCACCACCCTGAGACCTCCCGCCCAGATTCCAACATC TACAAGAAGCCTCCCATCTATAAGCAGAGAGAGTCCGTGGGAGGCAGCCCTCAGACCAAG CACCTCATCGAGGATCTCATCGAGTCATCCAAGTTTCCTGCAGCCCAGCCCCCAGAC CCCAACCAGCCAGCCAAAATCGAAACCGACTACTGGCCATGCCCCCCGTCTCTGGCTGTT CTCAGTAAGGTTACTTCCAACTTGGGAAAGATGATCTTGAAAGAAGAGATGGAAAAGTCA TTGCCGATCCGAAGGAAAACCCGCTCTCTGCCTGACCGGACACCCTTCCATACCTCCTTG CACCAGGGAACGTCTAAATCTTCCTCTCTCCCCGCCTATGGCAGGACCACCCTGAGCCGG CTACAGTCCACAGAGTTCAGCCCATCAGGGAGTGAGACTGGAAGCCCAGGCCTGCAGATC TATCCCTATGAAATGCTAGTGGTGACCAACAAGGGGCGAACCAAGCTGCCACCGGGGGTG GATCGGATGCGGCTTGAGAGGCATCTGTCTGCCGAGGACTTCTCAAGGGTATTTGCCATG TCCCCTGAAGAGTTTGGCAAGCTGGCTCTGTGGAAGCGGAATGAGCTCAAGAAGAAGACCC

TCTCTCTTC

Restriction Sites: Please inquire ACCN: NM 001114138

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

> 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).



Dematin (DMTN) (NM_001114138) Human Untagged Clone - SC318848

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 001114138.1</u>, <u>NP 001107610.1</u>

RefSeq Size: 2626 bp
RefSeq ORF: 1152 bp
Locus ID: 2039
UniProt ID: Q08495
Cytogenetics: 8p21.3

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

isoforms. [provided by RefSeq, Nov 2014]

Transcript Variant: This variant (5) contains an alternate splice site 5' UTR and lacks an alternate in-frame exon in the 3' coding region, compared to variant 1. Variants 4, 5, 7, 14, 15 and 16 encode the same isoform (2, also known as the 48 kDa subunit, PMID:7615546), which is shorter than isoform 1.

progression. Alternative splicing results in multiple transcript variants encoding different