

Product datasheet for **MC208441**

Dmtn (NM_013514) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dmtn (NM_013514) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dmtn
Synonyms: AI325486; dematin; Epb4.9; Epb49
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC208441 representing NM_013514
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAACGTCTGCAGAAGCAACCTTTACCTCCCCGGGGAGCGTCAGCTCCTCCAGAGACTCCAGTGTGC
 CCGGCTCTCCCTCCAGCATCGTGGCCAAGATGGACAACCAGGTGTTGGGCTACAAGGATCTGGCTGCCAT
 CCCCAGGACAAGGCCATCCTGGACATTGAGCGACCTGACCTCATGATCTATGAGCCCCACTTTACCTAT
 TCCTCTCGAACATGTAGAGCTGCCAGAACCCGGGAGTGCTCACTGTCACCCAAATCCACATCCCCC
 CACCGTCTCCAGAGGTGTGGCGGAGAGCCGGACTCTTGAATCATCTCTCAGGTTCAACCCCAAGGAC
 CACAGGGACCCCCAGGACCAGCCTGCCCACTTCCACCACCTGAGACTACCCGCCCGGATTCCAACATC
 TACAAGAAGCCACCCATCTACAAACAGAGAGAATCCGTGGGAGGCAGCCCTCAGAGCAAGCACCTCATCG
 AGGACCTCATCATCGAATCCTCCAAGTTTCTGCAGCGCAGCCCCCTGACCCCAACCAGCCAGCCAAGAT
 AGAGACTGACTACTGGCCATGTCCCCGTCGCTGGCCGTTGTGGAGACAGAATGGAGGAAACGGAAGGCA
 TCTCGAAAGGGGGCAGAGGAAGAGGAGGAAGAGGAAACGACTGACTCTGAAGAGGAGATTAAGGCCATCA
 GGAACCGCAGAAAGAGGAGCTCAGTAAGGTTACTTCCAATTGGGAAAGATGATCTTGAAGAAGAGAT
 GGAAAAGTCATTGCCATCCGGAGGAAAACACGCTCTCTGCTGACCGGACACCCTCCATACCTCCTTG
 CATTCCGGAAACATCTAAATCCTCTTCGTTCTTCTTCTATGGCAGGACCACCTGAGCCGGCTACAGTCCA
 CAGAATTCAGCCCATCGGGAAGTGGGCTGGGAGCCAGGCTGCAGATCTATCCCTATGAGATGCTGGT
 GGTGACCAATAAGGGGAGAACTAAGCTGCCTCCGGGTGTGGACCGCATGAGGCTTGGAGGCATTTGTCA
 GCAGAGGACTTCTAGGGTCTTCGCCATGTCTCCCGAGGAGTTGGCAAGCTGGCCCTGTGGAAGCGGA
 ACGAACTTAAGAAGAAAGCTTCCCTCTT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



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ACCN:	NM_013514
Insert Size:	1152 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).
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:	<ol style="list-style-type: none">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_013514.4</u> , <u>NP_038542.1</u>
RefSeq Size:	4129 bp
RefSeq ORF:	1152 bp
Locus ID:	13829
UniProt ID:	<u>Q9WV69</u>
Cytogenetics:	14 36.32 cM

Gene 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]

Transcript Variant: This variant (2) differs in the 5' UTR and lacks an in-frame coding exon in the 3' region, compared to variant 1. The resulting isoform (2) lacks an internal segment, compared to isoform 1. Variants 2, 3 and 10 encode the same isoform 2. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.