

Product datasheet for MR205979

Dmtn (NM_013514) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dmtn (NM_013514) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dmtn
Synonyms:	A1325486; dematin; Epb4.9; Epb49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205979 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACGCTGCAGAAGCAACCTTTACCTCCCCGGGGAGCGTCAGCTCCTCCAGAGACTCCAGTGTGC
CCGGCTCTCCCTCCAGCATCGTGGCCAAGATGGACAACCAAGGTGTTGGGCTACAAGGATCTGGCTGCCAT
CCCCAAGGACAAGGCCATCCTGGACATTGAGCGACCTGACCTCATGATCTATGAGCCCCACTTTACCTAT
TCCCTCCTGGAACATGTAGAGCTGCCAGAAGCCGGGAGTGCTCACTGTACCCAAATCCACATCCCCC
CACCGTCTCCAGAGGTGTGGCGGAGAGCCGGACTCTTGAATCATCTCTCAGGTTCAACCCCAAGGAC
CACAGGGACCCCAAGGACCGCTGCCCACTTCCACCACCTGAGACTACCCGCCCGGATTCACATC
TACAAGAAGCCACCCATCTACAACAGAGAGAATCCGTGGGAGGAGCCCTCAGAGCAAGCACCTCATCG
AGGACCTCATCATCGAATCCTCCAAGTTTCTGCAGCGCAGCCCTGACCCCAACAGCCAGCCAAGAT
AGAGACTGACTACTGGCCATGTCCCCGTGCTGGCCGTTGTGGAGACAGAATGGAGGAAACGGAAGGCA
TCTCGAAAGGGGGCAGAGGAAGAGGAGGAAGAGGACGATGACTCTGAAGAGGAGATTAAGGCCATCA
GGAAACGGCAGAAAGAGGAGCTCAGTAAGGTTACTTCAAATTTGGGAAAGATGATCTTGAAGAAGAGAT
GGAAAAGTCATTGCCATCCGGAGGAAAACACGCTCTCTGCCTGACCCGACACCCCTCCATACCTCCTTG
CATTCCGGGAACATCTAAATCCTTTCGCTTCTTCTCCTATGGCAGGACCACCTGAGCCGGCTACAGTCCA
CAGAATTCAGCCCATCGGGAAGTGAGGCTGGGAGCCAGGCTGCAGATCTATCCCTATGAGATGCTGGT
GGTGACCAATAAGGGGAGAACTAAGCTGCCTCCGGGTGTGGACCGCATGAGGCTTGAGAGGCATTTGTCA
GCAGAGGACTTCTTAGGGTCTTCGCCATGTCTCCCGAGGAGTTTGGCAAGCTGGCCCTGTGGAAGCGGA
ACGAACTTAAGAAGAAAGCTTCCCTCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR205979 protein sequence
Red=Cloning site Green=Tags(s)

MERLQKQPLTSPGSVSSSRDSSVPGSPSSIVAKMDNQVLGYKDAAIPKDKAILDIERPDLMIYEPHFTY
 SLLLEHVELPRSRECSLSPKSTSPPPSPEVWAESRTLGIISQASTPRTTGTPTSLPHFHPETTRPDSNI
 YKKPPIYKQRESVGGSPQSKHLIEDLIISSKFPAAQPPDPNQPAKIETDYWPCPPSLAVVETWRKRKA
 SRKGAEEDDDSEEEIKAIRERQKEELSKVTSNLGKMILKEEMKSLPIRRKTRSLPDRTPFHTSL
 HSGTSKSSSLPSYGRITLRLQSTEFSPSGSEAGSPGLQIYPYEMLVVTNKGRTKLPVGVDRMLERHLS
 AEDFSRVFAMSPPEFGKLALWKRNELKKKASLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_013514

ORF Size: 1152 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_013514.4](#), [NP_038542.1](#)

RefSeq Size: 4129 bp

RefSeq ORF: 1152 bp

Locus ID: 13829

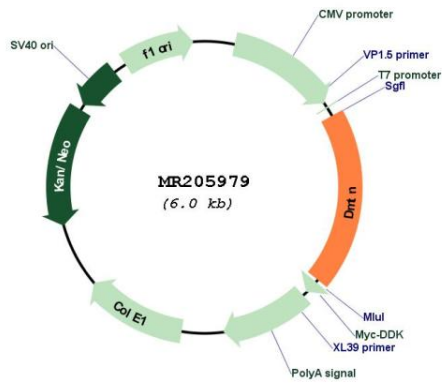
UniProt ID: [Q9WV69](#)

Cytogenetics: 14 36.32 cM

MW: 43 kDa

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]

Product images:



Circular map for MR205979