

## Product datasheet for RC225632

### Dematin (DMTN) (NM\_001114135) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dematin (DMTN) (NM_001114135) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dematin
Synonyms:	DMT; EPB49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225632 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAACGGCTGCAGAAGCAACCACTTACCTCCCCGGGAGCGTGAGCCCTCCCGAGATTCAGTGTGC  
CTGGCTCTCCCTCCAGCATCGTGGCCAAGATGGACAATCAGGTGCTGGGTACAAGGACCTGGCTGCCAT  
CCCCAAGGACAAGGCCATCCTGGACATCGAGCGGCCGACCTCATGATCTACGAGCCTCACTTCACTTAT  
TCCCTCCTGGAACACGTGGAGCTGCCTCGACGCCGAGCGCTCGCTGTACCCAAATCCACATCCCCC  
CACCATCCCAGAGGTGTGGCGGACAGCCGGTCGCTGGAATCATCTCTCAGGCCTCGGCCCCAGAAC  
CACTGGAACCCCGGACCAGCCTGCCCATTTCCACCACCTGAGACCTCCCGCCAGATTCCAACATC  
TACAAGAAGCCTCCCATCTATAAGCAGAGAGAGTCCGTGGGAGGAGCCCTCAGACCAAGCACCTCATCG  
AGGATCTCATCATCGAGTCATCCAAGTTTCTGACGCCAGCCCCAGACCCCAACCAGCCAGCCAAAAT  
CGAAACCGACTACTGGCCATGCCCCCGTCTCTGGCTGTTGTGGAGACAGAATGGAGGAAGCGGAAGGCG  
TCTCGGAGGGGAGCAGAGGAAGAGGAGGAGGAGGAAGATGACGACTCTGGAGAGGAGATGAAGGCTCA  
GGGAGCGTCAGAGAGAGGAACCTCAGTAAGGTTACTTCAAATTTGGGAAAGATGATCTTGAAGAAGAGAT  
GGAAAAGTCATTGCCGATCCGAAGGAAAACCCGCTCTCTGCCTGACCCGGACACCTTCCATACCTCCTTG  
CACCAGGGAACGTCTAAATCTTCTCTCTCCCCGCTATGGCAGGACCACCTGAGCCGGCTACAGTCCA  
CAGAGTTCAGCCCATCAGGGAGTGAGACTGGAAGCCAGGCCTGCAGAACGGAGAGGGCCAGAGGGGGAG  
GATGGACCGGGGAACTCCCTGCCTGTGTGCTGGAGCAGAAGATCTATCCCTATGAAATGCTAGTGGTG  
ACCAACAAGGGGCGAACCAAGCTGCCACCGGGGTGGATCGGATGCGGCTTGAGAGGCATCTGTCTGCCG  
AGGACTTCTCAAGGATTTGCCATGTCCCTGAAGAGTTTGGCAAGCTGGCTCTGTGGAAGCGGAATGA  
GCTCAAGAAGAAGGCCTCTCTTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC225632 protein sequence  
Red=Cloning site Green=Tags(s)

MERLQKQPLTSPGSVSPSRDSSVPGSPSSIVAKMDNQVLGYKDLAAIPKDKAILDIERPDLMIYEPHFTY  
 SLLLEHVELPRSRERSLSPKSTSPPPSPEVWADSRSPGII SQASAPRTTGTPTSLPHFHPETS SRPDSNI  
 YKKPPIYKQRESVGGSPQTKHLIEDLIISSKFPAAQPPDPNPAPAKIETDYWPCPPSLAVVETEWKRKA  
 SRRGAEEDDDDDSGEEMKALRERQREELSKVTSNLGKMILKEEMKSLPIRRKTRSLPDRTPFHTSL  
 HQGTSKSSSLPAYGRITLRLQSTEFSPSGSETGSPGLQNGEGQRGRMDRGNLSLPCVLEQKIYPYEMLVV  
 TNKGRITLPPGVDRMLERHLSAEDFSRVFAMSPPEEFGKLALWKRNELKKKASLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6410\\_c09.zip](https://cdn.origene.com/chromatograms/mk6410_c09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001114135

**ORF Size:** 1215 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\\_001114135.5](#)

**RefSeq Size:** 2604 bp

**RefSeq ORF:** 1218 bp

**Locus ID:** 2039

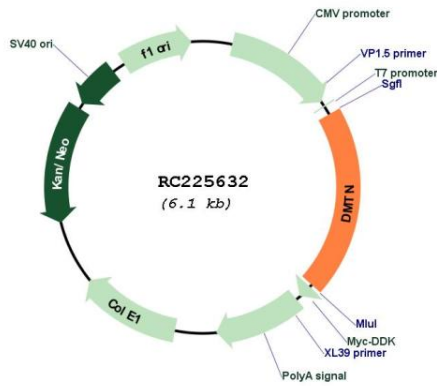
**UniProt ID:** [Q08495](#)

**Cytogenetics:** 8p21.3

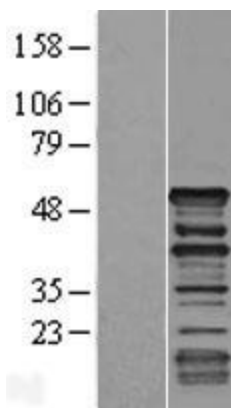
**MW:** 45.5 kDa

**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]

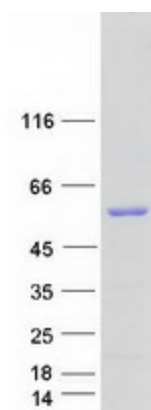
Product images:



Circular map for RC225632



Western blot validation of overexpression lysate (Cat# [LY426463]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225632 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DMTN protein (Cat# [TP325632]). The protein was produced from HEK293T cells transfected with DMTN cDNA clone (Cat# RC225632) using MegaTran 2.0 (Cat# [TT210002]).