

**Product Name: Dematin Rabbit Polyclonal Antibody**  
**Catalog #: APRab09909**



## Summary

<b>Production Name</b>	Dematin Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IF,IHC,WB,
<b>Reactivity</b>	Human,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	EPB49
<b>Alternative Names</b>	EPB49; DMT; Dematin; Erythrocyte membrane protein band 4.9
<b>Gene ID</b>	2039.0
<b>SwissProt ID</b>	Q08495.The antiserum was produced against synthesized peptide derived from human Dematin. AA range:356-405

## Application

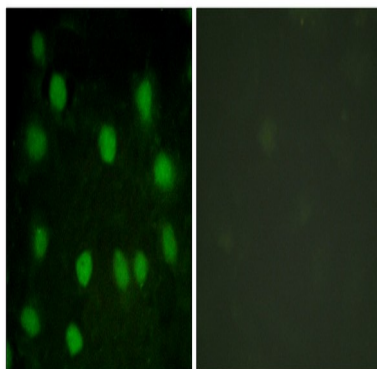
<b>Dilution Ratio</b>	WB 1:500 - 1:2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
<b>Molecular Weight</b>	50kD

## Background

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 didomain: Consists of a large core fragment, the amino-terminal portion, and a small headpiece, the C-terminal portion. The headpiece can bind but cannot bundle actin filaments., domain: Contains at least two actin-binding sites, one in the headpiece domain and one in the amino-terminal portion., function: Actin-bundling protein. May function in mitogen-activated protein kinase pathway., PTM: Actin-bundling activity is abolished upon phosphorylation by cAMP-dependent protein kinase., PTM: The N-terminus is blocked., similarity: Belongs to the villin/gelsolin family., similarity: Contains 1 HP (headpiece) domain., subunit: Exists in solution as a trimer of two short isoforms and one long isoform linked by disulfide bonds (Probable). Interacts with RASGRF2., tissue specificity: Heart, brain, lung, skeletal muscle, and kidney.,

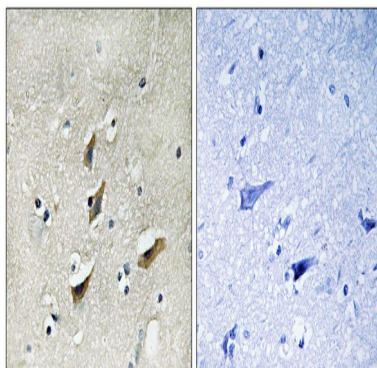
## Research Area

## Image Data

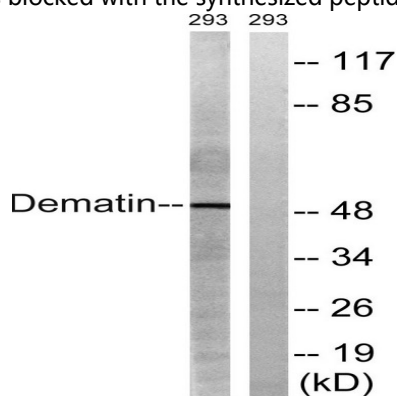


Immunofluorescence analysis of HUVEC cells, using Dematin Antibody. The picture on the right is blocked with the synthesized peptide.

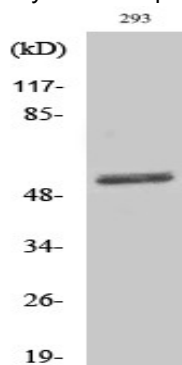
**Product Name: Dematin Rabbit Polyclonal Antibody**  
**Catalog #: APRab09909**



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Dematin Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using Dematin Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Dematin Polyclonal Antibody

## Note

For research use only.