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

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight	50kDa

Antigen Information

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

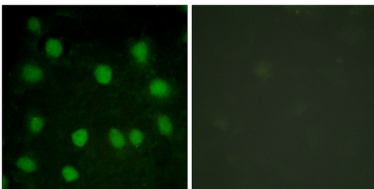
Background

The protein encoded by this gene is an actin binding and bundling protein that plays a structural role in erythrocytes, by

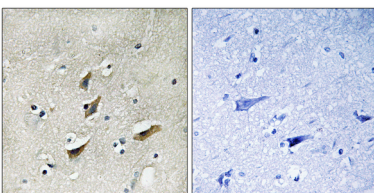
stabilizing and attaching the spectrin/actin cytoskeleton to the erythrocyte membrane in a phosphorylation-dependent manner. This protein contains a core domain in the N-terminus, and a headpiece domain in the C-terminus that binds F-actin. When purified from erythrocytes, this protein exists as a trimer 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

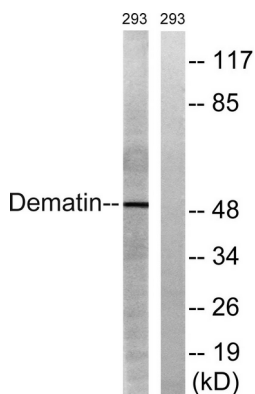
Image Data



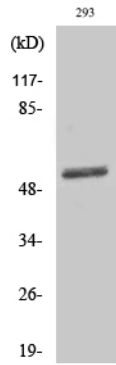
Immunofluorescence analysis of HUVEC cells, using Dematin Antibody. The picture on the right is blocked with the synthesized peptide.



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