
Product Name: Mena Rabbit Polyclonal Antibody**Catalog #: APRab13818**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
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 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	67kDa

Antigen Information

Gene Name	ENAH
Alternative Names	ENAH; MENA; Protein enabled homolog
Gene ID	55740.0
SwissProt ID	Q8N8S7
Immunogen	The antiserum was produced against synthesized peptide derived from human ENAH. AA range:472-521

Background

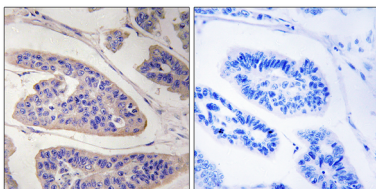
This gene encodes a member of the enabled/ vasodilator-stimulated phosphoprotein. Members of this gene family are

involved in actin-based motility. This protein is involved in regulating the assembly of actin filaments and modulates cell adhesion and motility. Alternate splice variants of this gene have been correlated with tumor invasiveness in certain tissues and these variants may serve as prognostic markers. A pseudogene of this gene is found on chromosome 3. [provided by RefSeq, Sep 2016],domain:The EVH2 domain is comprised of 3 regions. Block A is a thymosin-like domain required for G-actin binding. The KLKR motif within this block is essential for the G-actin binding and for actin polymerization. Block B is required for F-actin binding and subcellular location, and Block C for tetramerization.,function:Ena/VASP proteins are actin-associated proteins involved in a range of processes dependent on cytoskeleton remodeling and cell polarity such as axon guidance and lamellipodial and filopodial dynamics in migrating cells. ENAH induces the formation of F-actin rich outgrowths in fibroblasts. Acts synergetically with BAIAP2-alpha and downstream of NTN1 to promote filipodia formation. Required for the actin-based mobility of Listeria monocytogenes.,PTM:NTN1-induced PKA phosphorylation on Ser-265 directly parallels the formation of filopodial protrusions.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the Ena/VASP family.,similarity:Contains 1 WH1 domain.,subcellular location:Targeted to the leading edge of lamellipodia and filopodia by MRL family members. Colocalizes at filopodial tips with a number of other proteins including vinculin and zyxlin. Colocalizes with N-WASP at the leading edge. Colocalizes with GPHN and PFN at synapses.,subunit:Homotetramer (By similarity). Interacts with APBB1IP, PFN1 and ROBO4. Isoforms, containing the polyproline-rich regions with PPLP motifs, bind the WW domain of APBB1IP. Isoforms, containing the PPSY motif, bind, in vitro, to the WW2 and WW3 domains of NEDD4 and to the WW1 domain of YAP1. Binds the SH3 domain of BAIAP2-alpha but only after the autoinhibitory region of BAIAP2-alpha has been blocked by interaction with CDC42. Interacts, via the EVH1/WH1 domain, with the Pro-rich domains from VCL, ZYX and Listeria monocytogenes actA. Interaction with ZYX is important for targeting ENAH to focal adhesions and enhances production of actin-rich structures at the apical surface of cells. Interacts, through the Pro-rich region, with the C-terminal SH3 domain of DNMPB. Binds GPHN.,tissue specificity:Expressed in myoepithelia of parotid, breast, bronchial glands and sweat glands. Expressed in colon-rectum muscularis mucosae epithelium, pancreas acinar ductal epithelium, endometrium epithelium, prostate fibromuscular stroma and placenta vascular media. Overexpressed in a majority of breast cancer cell lines and primary breast tumor lesions.,

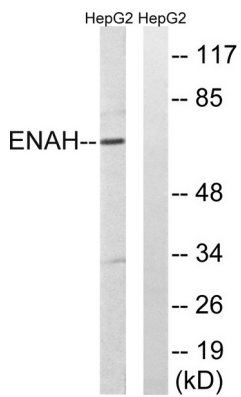
Research Area

Regulates Actin and Cytoskeleton;

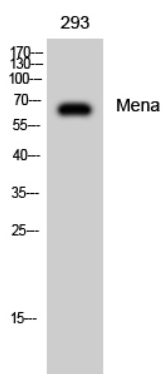
Image Data



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



Western blot analysis of lysates from HepG2 cells, using ENAH Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of 293 cells using Mena Polyclonal Antibody diluted at 1 : 2000