Product name:	Mena Rabbit Polyclonal Antibody
Cat number:	ABN13818
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human ENAH. AA range:472-521
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight:	67kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 syngeristically 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 muscolaris mucosae epithelium, pancreas acinar ductal epithelium, endometrium epithelium, prostate fibromuscolar stroma and placenta vascular media. Overexpressed in a majority of breast cancer cell lines and primary breast tumor lesions.,