

VASP Polyclonal Antibody

Catalog No :	YT4857
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	VASP
Fields :	>>Rap1 signaling pathway;>>cGMP-PKG signaling pathway;>>Focal adhesion;>>Tight junction;>>Platelet activation;>>Fc gamma R-mediated phagocytosis;>>Leukocyte transendothelial migration
Gene Name :	VASP
Protein Name :	Vasodilator-stimulated phosphoprotein
Human Gene Id :	7408
Human Swiss Prot No :	P50552
Mouse Gene Id :	22323
Mouse Swiss Prot No :	P70460
Immunogen :	The antiserum was produced against synthesized peptide derived from human VASP. AA range:124-173
Specificity :	VASP Polyclonal Antibody detects endogenous levels of VASP protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 46kD,50kD

Cell Pathway : Focal adhesion;Fc gamma R-mediated phagocytosis;Leukocyte transendothelial migration;

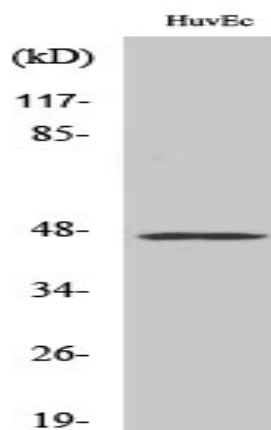
Background : Vasodilator-stimulated phosphoprotein (VASP) is a member of the Ena-VASP protein family. Ena-VASP family members contain an EHV1 N-terminal domain that binds proteins containing E/DFPPPPXD/E motifs and targets Ena-VASP proteins to focal adhesions. In the mid-region of the protein, family members have a proline-rich domain that binds SH3 and WW domain-containing proteins. Their C-terminal EVH2 domain mediates tetramerization and binds both G and F actin. VASP is associated with filamentous actin formation and likely plays a widespread role in cell adhesion and motility. VASP may also be involved in the intracellular signaling pathways that regulate integrin-extracellular matrix interactions. VASP is regulated by the cyclic nucleotide-dependent kinases PKA and PKG. [provided by RefSeq, Jul 2008],

Function : 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.,domain:The WH1 domain mediates interaction with XIRP1.,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. VASP promotes actin nucleation and increases the rate of actin polymerization in the presence of capping protein. Plays a role in actin-based activity of Listeria monocytogenes in platelets.,PTM:Major substrate for cAMP-dependent (PKA) and cGMP-dependent protein kinase (PKG) in platelets. The preferred

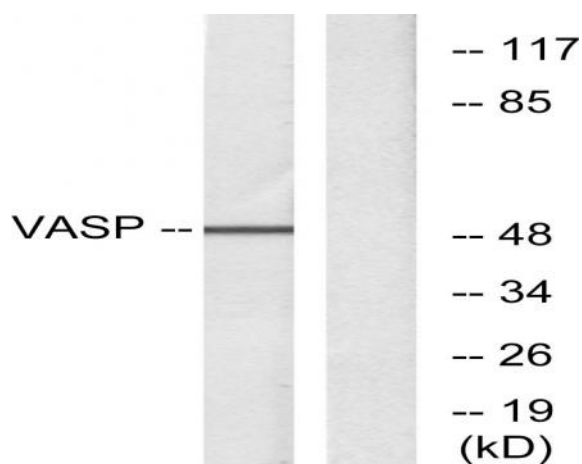
Subcellular Location : Cytoplasm. Cytoplasm, cytoskeleton. Cell junction, focal adhesion. Cell junction, tight junction . Cell projection, lamellipodium membrane. Cell projection, filopodium membrane. Targeted to stress fibers and focal adhesions through interaction with a number of proteins including MRL family members. Localizes to the plasma membrane in protruding lamellipodia and filopodial tips. Stimulation by thrombin or PMA, also translocates VASP to focal adhesions. Localized along the sides of actin filaments throughout the peripheral cytoplasm under basal conditions. In pre-apoptotic cells, colocalizes with MEFV in large specks (pyroptosomes).

Expression : Highly expressed in platelets.

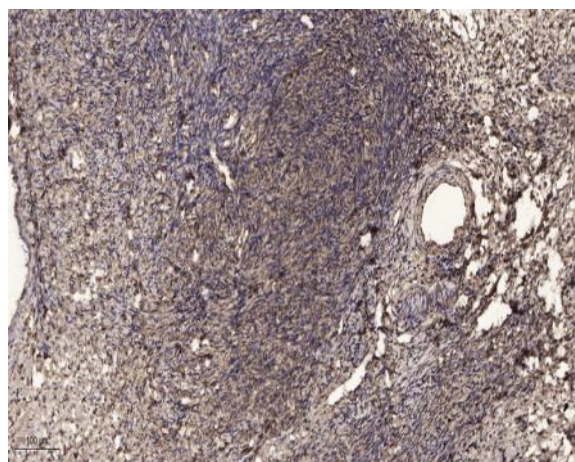
Products Images



Western Blot analysis of various cells using VASP Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from NIH/3T3 cells, treated with forskolin 40 μ M 30', using VASP Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human oophoroma. 1, Antibody was diluted at 1:200(4 $^{\circ}$ overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).