

Anti-VASP Picoband Antibody
Catalog # ABO10052

Specification

Anti-VASP Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	P50552
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Vasodilator-stimulated phosphoprotein(VASP) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-VASP Picoband Antibody - Additional Information

Gene ID 7408

Other Names

Vasodilator-stimulated phosphoprotein, VASP, VASP

Calculated MW

39830 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

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).

Tissue Specificity

Highly expressed in platelets. .

Protein Name

Vasodilator-stimulated phosphoprotein

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human VASP (78-114aa NFHQWRDARQVWGLNFGSKEDAAQFAAGMASALEALE), different from the related mouse sequence by four amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-VASP Picoband Antibody - Protein Information**Name** VASP**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, lamellipodial and filopodial dynamics, platelet activation and cell migration. VASP promotes actin filament elongation. It protects the barbed end of growing actin filaments against capping and increases the rate of actin polymerization in the presence of capping protein. VASP stimulates actin filament elongation by promoting the transfer of profilin-bound actin monomers onto the barbed end of growing actin filaments. Plays a role in actin-based mobility of *Listeria monocytogenes* in host cells. Regulates actin dynamics in platelets and plays an important role in regulating platelet aggregation.

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton. Cell junction, focal adhesion. Cell junction, tight junction Cell projection, lamellipodium membrane. Cell projection, filopodium membrane. Note=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)

Tissue Location

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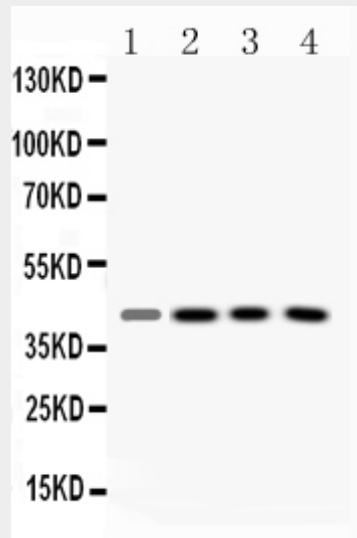
Anti-VASP Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

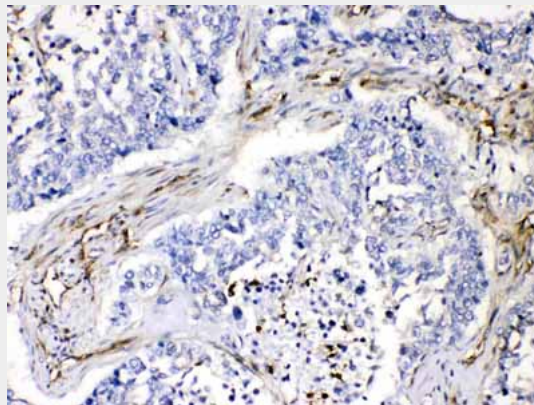
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

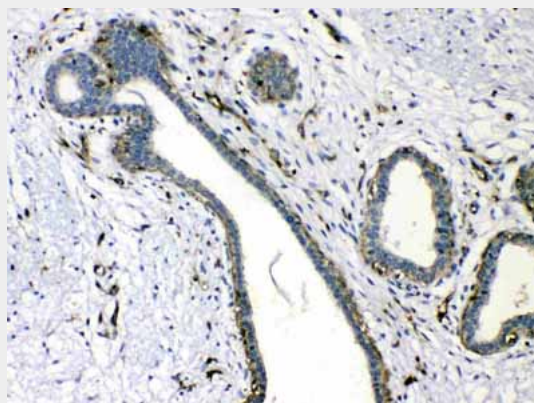
Anti-VASP Picoband Antibody - Images



Western blot analysis of VASP expression in rat liver extract (lane 1), mouse kidney extract (lane 2), HELA whole cell lysates (lane 3) and HEPG2 whole cell lysates (lane 4). VASP at 40KD was detected using rabbit anti- VASP Antigen Affinity purified polyclonal antibody (Catalog # ABO10052) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .



VASP was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti-VASP Antigen Affinity purified polyclonal antibody (Catalog # ABO10052) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



VASP was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- VASP Antigen Affinity purified polyclonal antibody (Catalog # ABO10052) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

Anti-VASP Picoband Antibody - 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.