

Anti-VASP Picoband Antibody

Catalog # ABO10052

Product Information

Application	WB, IHC-P
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.

Additional Information

Gene ID	7408
Other Names	Vasodilator-stimulated phosphoprotein, VASP, VASP
Calculated MW	39830
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/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. .
Source	Eukaryota
Protein Name	Vasodilator-stimulated phosphoprotein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

Protein Information

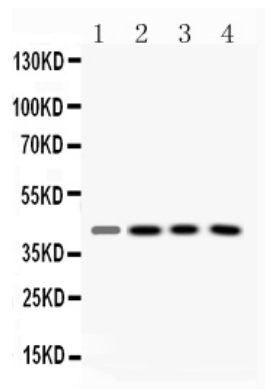
Name	VASP
Function	Ena/VASP proteins are actin-associated proteins involved in a range of processes dependent on cytoskeleton remodeling and cell polarity such as axon guidance, lamellipodial and filopodial dynamics, platelet activation and cell migration. VASP promotes actin filament elongation. It 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 <i>Listeria monocytogenes</i> 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	Highly expressed in platelets.

Background

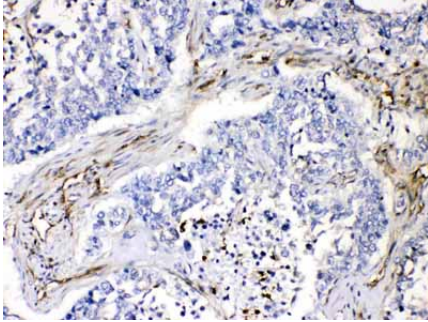
Vasodilator-stimulated phosphoprotein (VASP) is a member of the Ena-VASP protein family. Ena-VASP family members contain an EHV1 N-terminal domain that binds proteins containing E/DFPPPPXD/E motifs and targets Ena-VASP proteins to focal adhesions. In the mid-region of the protein, family members have 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.

Images

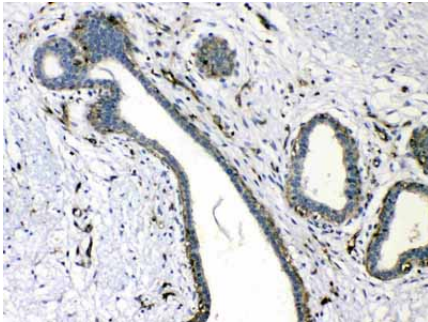
Western blot analysis of VASP expression in rat liver extract (lane 1), mouse kidney extract (lane 2), HELA whole cell lysates (lane 3) and HEPG2 whole cell lysates (lane 4). VASP at 40KD was detected using rabbit anti-



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 μ g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.