

Phospho-VASP Antibody

Rabbit Polyclonal Antibody Catalog # ABV10550

Specification

Phospho-VASP Antibody - Product Information

Application WB
Primary Accession P50552

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 39830

Phospho-VASP Antibody - Additional Information

Gene ID 7408

Application & Usage Western blotting (0.5-4 μg/ml) and

Immunohistochemistry. However, the optimal concentrations should be determined individually. The antibody recognizes 51 kDa phosphorylated VASP from samples of human, mouse, and rat origins. Reactivity to other species has not

been tested.

Other Names

Vasodilator-stimulated phosphoprotein

Target/Specificity

Phospho-VASP

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100~\mu g$ (0.5 mg/ml) affinity purified rabbit polyclonal antibody in 1X phosphate-buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



Precautions

Phospho-VASP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-VASP 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 preapoptotic cells, colocalizes with MEFV in large specks (pyroptosomes)

Tissue Location

Highly expressed in platelets.

Phospho-VASP Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-VASP Antibody - Images

Phospho-VASP Antibody - Background

Vasodilator-stimulated phosphoprotein (VASP) belongs to the Ena/VASP family of adaptor proteins linking the cytoskeletal system to the signal transduction pathways. VASP functions in cytoskeletal organization, fibroblast migration, platelet activation and axon guidance. Three phosphorylation sites, Ser157, Ser239 and Thr278, have been identified. Ser157 is the major PKA phosphorylation site. Evidence s μ ggests that VASP phosphorylation reduces its association with actin and has a negative effect on actin polymerization.