

## **VASP Antibody**

Rabbit Polyclonal Antibody Catalog # ABV10549

## **Specification**

## **VASP Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB, IHC
P50552
Human, Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
39830

## **VASP Antibody - Additional Information**

**Gene ID 7408** 

Positive Control

Application & Usage

Western Blot: Jurkat cell, 3T3 cells and rat kidney cells. IHC: Liver tissue Western blotting (0.5-4  $\mu$ g/ml) and Immunohistochemistry (5  $\mu$ g/ml). However, the optimal conditions should be determined individually. Other applications have not been determined. The antibody recognizes ~46 kDa VASP from samples of human, mouse, and rat origins. Reactivity to other species has not been tested.

### **Other Names**

Vasodilator-stimulated phosphoprotein

**Target/Specificity** 

**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**

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

## **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.

## **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

# **VASP Antibody - Images**

### **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. Evidence s µggests that VASP phosphorylation reduces its association with actin and has a negative effect on actin





polymerization.