

# VASP Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13999b

### **Product Information**

**Application** IHC-P, WB, E **Primary Accession** P50552 **Other Accession** NP 003361.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Calculated MW** 39830 **Antigen Region** 267-296

## **Additional Information**

**Gene ID** 7408

Other Names Vasodilator-stimulated phosphoprotein, VASP, VASP

Target/Specificity This VASP antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 267-296 amino acids from the

C-terminal region of human VASP.

**Dilution** IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** VASP Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

### **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** 

Highly expressed in platelets.

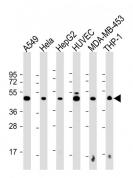
# **Background**

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/DFPPPXD/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.

### References

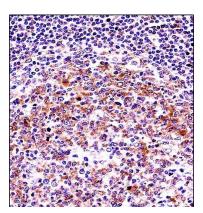
Barragan, P., et al. Thromb. Haemost. 104(2):410-411(2010)
Dittrich, M., et al. Arterioscler. Thromb. Vasc. Biol. 30(4):843-850(2010)
Gan, L., et al. Mol. Immunol. 47(6):1278-1282(2010)
Osmancik, P., et al. Catheter Cardiovasc Interv 75(2):158-166(2010)
Siller-Matula, J.M., et al. J. Thromb. Haemost. 8(2):351-359(2010)

# **Images**



All lanes: Anti-VASP Antibody (C-term) at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: HUVEC whole cell lysate Lane 5: MDA-MB-453 whole cell lysate Lane 6: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

VASP Antibody (C-term) (Cat. #AP13999b)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue



followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of VASP Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# **Citations**

• The Antimetastatic Effect and Underlying Mechanisms of Thioredoxin Reductase Inhibitor Ethaselen.

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