

VASP (H-90): sc-13975

BACKGROUND

The Wiskott-Aldrich syndrome (WAS) is characterized by thrombocytopenia, eczema, defects in cell-mediated and humoral immunity and a propensity for lymphoproliferative diseases. The syndrome is the result of a mutation in the gene encoding a proline-rich protein termed WASP. WASP has been identified as a downstream effector of Cdc42 and has been implicated in Actin polymerization and cytoskeletal organization. A distantly related protein, VASP (vasodilator-stimulated phosphoprotein), is involved in the maintenance of cyto-architecture by interacting with Actin-like filaments. VASP shares a limited degree of homology with the amino-terminus of WASP, which is frequently mutated in WAS patients. An established substrate of cAMP and cGMP dependent kinases, VASP is phosphorylated on a regulatory Serine residue 157 and localizes to focal adhesions, microfilaments and highly active regions of the plasma membrane. VASP is highly expressed in human platelets and, like WASP, may play a role in cytoskeletal organization.

CHROMOSOMAL LOCATION

Genetic locus: VASP (human) mapping to 19q13.32; Vasp (mouse) mapping to 7 A3.

SOURCE

VASP (H-90) is a rabbit polyclonal antibody raised against amino acids 271-360 of VASP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

VASP (H-90) is recommended for detection of VASP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VASP (H-90) is also recommended for detection of VASP in additional species, including canine and bovine.

Suitable for use as control antibody for VASP siRNA (h): sc-29516, VASP siRNA (m): sc-36809, VASP shRNA Plasmid (h): sc-29516-SH, VASP shRNA Plasmid (m): sc-36809-SH, VASP shRNA (h) Lentiviral Particles: sc-29516-V and VASP shRNA (m) Lentiviral Particles: sc-36809-V.

Molecular Weight of VASP: 46 kDa.

Molecular Weight of phosphorylated VASP: 50 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

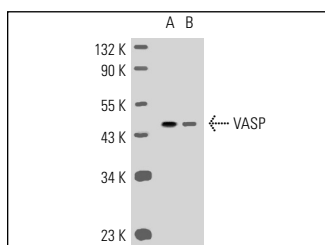
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

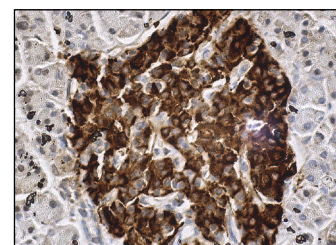
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



VASP (H-90): sc-13975. Western blot analysis of VASP expression in HeLa (A) and COLO 320DM (B) whole cell lysates.



VASP (H-90): sc-13975. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans.

SELECT PRODUCT CITATIONS

- Bodin, S., et al. 2005. Integrin-dependent interaction of lipid rafts with the Actin cytoskeleton in activated human platelets. *J. Cell Sci.* 118: 759-769.
- Hennenberg, M., et al. 2009. Hepatic VASP upregulation in rats with secondary biliary cirrhosis by expression in the peribiliary vascular plexus. *Microvasc. Res.* 78: 235-240.
- Schröder, P.C., et al. 2011. A signature of six genes highlights defects on cell growth and specific metabolic pathways in murine and human hepatocellular carcinoma. *Funct. Integr. Genomics* 11: 419-429.
- Peng, G., et al. 2012. Sustained therapeutic hypercapnia attenuates pulmonary arterial Rho-kinase activity and ameliorates chronic hypoxic pulmonary hypertension in juvenile rats. *Am. J. Physiol. Heart Circ. Physiol.* 302: H2599-H2611.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **VASP (A-11): sc-46668** or **VASP (D-11): sc-376226**, our highly recommended monoclonal alternatives to VASP (H-90).