

p-VASP (Ser 157)-R: sc-23506-R

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. A distantly related protein, VASP (vasodilator-stimulated phosphoprotein), is involved in the maintenance of cytoarchitecture 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 also phosphorylated on Serine 239 by cGMP-dependent protein kinase.

REFERENCES

1. Reinhard, M., et al. 1992. The 46/50 kDa phosphoprotein VASP purified from human platelets is a novel protein associated with actin filaments and focal contacts. *EMBO J.* 11: 2063-2070.
2. Butt, E., et al. 1994. cAMP- and cGMP-dependent protein kinase phosphorylation sites of the focal adhesion vasodilator-stimulated phosphoprotein (VASP) *in vitro* and in intact human platelets. *J. Biol. Chem.* 269: 14509-14517.
3. Reinhard, M., et al. 1995. Identification, purification and characterization of a zyxin-related protein that binds the focal adhesion and microfilament protein VASP (vasodilator-stimulated phosphoprotein). *Proc. Natl. Acad. Sci. USA* 92: 7956-7960.
4. Remold-O'Donnell, E., et al. 1996. Defects in Wiskott-Aldrich syndrome blood cells. *Blood* 87: 2621-2631.
5. Stewart, D.M., et al. 1996. Studies of the expression of the Wiskott-Aldrich syndrome protein. *J. Clin. Invest.* 97: 2627-2634.
6. Schindelhauer, D., et al. 1996. Wiskott-Aldrich syndrome: no strict genotype-phenotype correlations but clustering of missense mutations in the amino-terminal part of the WASP gene product. *Hum. Genet.* 98: 68-76.

CHROMOSOMAL LOCATION

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

SOURCE

p-VASP (Ser 157)-R is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 157 phosphorylated 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.

Blocking peptide available for competition studies, sc-23506 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

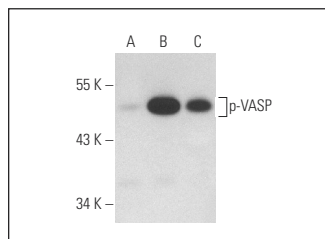
p-VASP (Ser 157)-R is recommended for detection of Ser 157 phosphorylated VASP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

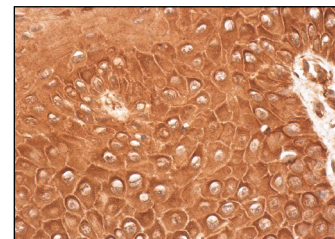
Molecular Weight of p-VASP: 50 kDa.

Positive Controls: VASP (m2): 293T Lysate: sc-127759 or human platelet extract: sc-363773.

DATA



p-VASP (Ser 157)-R: sc-23506-R. Western blot analysis of VASP phosphorylation in non-transfected: sc-117752 (A), mouse VASP transfected: sc-127759 (B) 293T whole cell lysates and human platelet extract (C).



p-VASP (Ser 157)-R: sc-23506-R. Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of squamous epithelial cells.

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.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **p-VASP (F-3): sc-365564** or **p-VASP (A-7): sc-365563**, our highly recommended monoclonal alternatives to p-VASP (Ser 157).