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 VASP. VASP has been identified as a downstream effector of Cdc42 and has been implicated in Actin polymerization and cytoskeletal organization. A distantly related protein, VASP (vaso-dilator-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 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 (A-11) is a mouse monoclonal antibody raised against amino acids 271-360 of VASP of human origin.

PRODUCT

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

VASP (A-11) is available conjugated to agarose (sc-46668 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-46668 HRP), 200 µg/ml, for WB, (HCO), and ELISA; to either phycoerythrin (sc-46668 PE), fluorescein (sc-46668 FITC), Alexa Fluor® 488 (sc-46668 AF488), Alexa Fluor® 546 (sc-46668 AF546), Alexa Fluor® 594 (sc-46668 AF594) or Alexa Fluor® 647 (sc-46668 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-46668 AF680) or Alexa Fluor® 790 (sc-46668 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

VASP (A-11) is recommended for detection of VASP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 VASP: 46 kDa.

Molecular Weight of phosphorylated VASP: 50 kDa.

STORAGE

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

DATA

Western blot analysis of VASP phosphorylation in non-transfected: sc-117752 (A, D), untreated human VASP transfected: sc-114993 (B, E) and lamella protein phosphatase (sc-200312A) treated human VASP transfected: sc-114992 (C, F) 293T whole cell lysates. Antibodies tested include p-VASP (A-7): sc-365633 (A, B, C) and VASP (A-11): sc-46668 (D, E, F).

SELECT PRODUCT CITATIONS


RESEARCH USE

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA?