

# WASP (P-15): sc-30478

## BACKGROUND

The Wiskott-Aldrich syndrome (WAS) is a disorder that results from a monogenic defect that has been mapped to the short arm of the X chromosome. WAS is characterized by thrombocytopenia, eczema, defects in cell-mediated and humoral immunity and a propensity for lymphoproliferative disease. The gene that is mutated in the syndrome encodes a proline-rich protein of unknown function designated WAS protein (WASP). A clue to WASP function came from the observation that T cells from affected males had an irregular cellular morphology and a disarrayed cytoskeleton suggesting the involvement of WASP in cytoskeletal organization. Close examination of the WASP sequence revealed a putative Cdc42/Rac interacting domain, homologous with those found in PAK65 and ACK. Subsequent investigation has shown WASP to be a true downstream effector of Cdc42.

## REFERENCES

1. Remold-O'Donnell, E., Rosen, F.S. and Kenney, D.M. 1996. Defects in Wiskott-Aldrich syndrome blood cells. *Blood* 87: 2621-2631.
2. Stewart, D.M., Treiber-Held, S., Kurman, C.C., Facchetti, F., Notarangelo, L.D. and Nelson, D.L. 1996. Studies of the expression of the Wiskott-Aldrich syndrome protein. *J. Clin. Invest.* 97: 2627-2634.
3. Symons, M., Derry, J.M., Karlak, B., Jiang, S., Lemahieu, V., McCormick, F., Francke, U. and Abo, A. 1996. Wiskott-Aldrich syndrome protein, a novel effector for the GTPase Cdc42Hs, is implicated in Actin polymerization. *Cell* 84: 723-734.
4. Kolluri, R., Tolia, K.F., Carpenter, C.L., Rosen, F.S. and Kirchhausen, T. 1996. Direct interaction of the Wiskott-Aldrich syndrome protein with the GTPase Cdc42. *Proc. Natl. Acad. Sci. USA* 93: 5615-5618.
5. Schindelbauer, D., Weiss, M., Hellebrand, H., Golla, A., Hergersberg, M., Seger, R., Belohradsky, B.H. and Meindl, A. 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: WAS (human) mapping to Xp11.22; Was (mouse) mapping to X A1.1.

## SOURCE

WASP (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WASP 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-30478 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

WASP (P-15) is recommended for detection of WASP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for WASP siRNA (h): sc-29525, WASP siRNA (m): sc-36830, WASP shRNA Plasmid (h): sc-29525-SH, WASP shRNA Plasmid (m): sc-36830-SH, WASP shRNA (h) Lentiviral Particles: sc-29525-V and WASP shRNA (m) Lentiviral Particles: sc-36830-V.

Molecular Weight of WASP: 66 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, BJAB whole cell lysate: sc-2207 or Ramos cell lysate: sc-2216.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **WASP (B-9): sc-13139** or **WASP (F-8): sc-365859**, our highly recommended monoclonal alternatives to WASP (P-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **WASP (B-9): sc-13139**.