

## Rabbit WASP Polyclonal Antibody | anti-WASP antibody

WASP Antibody

| CATALOG # | HOST   | REACTIVITY                                                                                        | APPLICATIONS                                                 |
|-----------|--------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| AAA329390 | Rabbit | Human, Mouse, Rat<br>Predicted Reactivity: Sheep (88%), Rabbit (100%), Dog (100%), Xenopus (100%) | ELISA, Immunocytochemistry, Immunofluorescence, Western Blot |

### PRODUCT SYNONYMS

WASP; Polyclonal Antibody; WASP Antibody; Eczema thrombocytopenia; IMD2; SCN1X; TH1; TH1.1; Thrombocytopenia 1 (X linked); U42471; Was; WASP; WASP\_HUMAN; Wiskott Aldrich syndrome (eczema thrombocytopenia); Wiskott Aldrich syndrome; Wiskott Aldrich syndrome protein; Wiskott-Aldrich syndrome protein; anti-WASP antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                                                                                                        |
| Reactivity                                     | Human, Mouse, Rat<br>Predicted Reactivity: Sheep (88%), Rabbit (100%), Dog (100%), Xenopus (100%)                                                                                                                                                                                                                                                             |
| Clonality                                      | Polyclonal                                                                                                                                                                                                                                                                                                                                                    |
| Isotype                                        | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                   |
| Specificity                                    | WASP Antibody detects endogenous levels of total WASP.<br>Tissue Specificity: Expressed predominantly in the thymus. Also found, to a much lesser extent, in the spleen.                                                                                                                                                                                      |
| Purity/Purification                            | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin                                                                                                                                                                                                                                                                  |
| Form/Format                                    | Liquid. Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                           |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                        |
| Applicable Applications for anti-WASP antibody | ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)                                                                                                                                                                                                                                                                  |
| Immunogen                                      | A synthesized peptide derived from human WASP, corresponding to a region within the internal amino acids.                                                                                                                                                                                                                                                     |
| Conjugation                                    | Unconjugated                                                                                                                                                                                                                                                                                                                                                  |
| Fragment                                       | Fab fragment                                                                                                                                                                                                                                                                                                                                                  |
| Post Translational Modifications               | Phosphorylated at Tyr-291 by FYN and HCK, inducing WAS effector activity after TCR engagement.<br>Phosphorylation at Tyr-291 enhances WAS activity in promoting actin polymerization and filopodia formation.                                                                                                                                                 |
| Subunit Structure                              | Binds the Arp2/3 complex. Interacts with CDC42, RAC, NCK, HCK, FYN, SRC kinase FGR, BTK, ABL1, PSTPIP1, WIP, and to the p85 subunit of PLC-gamma. Interacts (via C-terminus) with ALDOA. Interacts with NCK1 (via SH3 domains) (By similarity). Interacts with FCHSD2 (By similarity). (Microbial infection) Interacts with E.coli effector protein EspF (U). |
| Similarity                                     | The WH1 (Wasp homology 1) domain may bind a Pro-rich ligand. The CRIB (Cdc42/Rac-interactive-binding) region binds to the C-terminal WH2 domain in the autoinhibited state of the protein. Binding of Rho-type GTPases to the CRIB induces a conformation change and leads to activation.                                                                     |
| Subcellular Location                           | Cytoplasm>Cytoskeleton. Nucleus.                                                                                                                                                                                                                                                                                                                              |
| Preparation and Storage                        | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                   |

IMAGES



IF (Immunofluorescence)

Staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extract from HeLa, JK and Raji cells using WASP Antibody

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-WASP antibody | <p>Effector protein for Rho-type GTPases that regulates actin filament reorganization via its interaction with the Arp2/3 complex. Important for efficient actin polymerization. Possible regulator of lymphocyte and platelet function. Mediates actin filament reorganization and the formation of actin pedestals upon infection by pathogenic bacteria. In addition to its role in the cytoplasmic cytoskeleton, also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA. Promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs).</p> <p>Effector protein for Rho-type GTPases. Regulates actin filament reorganization via its interaction with the Arp2/3 complex. Important for efficient actin polymerization. Possible regulator of lymphocyte and platelet function. Mediates actin filament reorganization and the formation of actin pedestals upon infection by pathogenic bacteria.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                                          |
|----------------------------------|------------------------------------------------------------------------------------------|
| NCBI GI #                        | 4507909                                                                                  |
| NCBI GeneID                      | 7454                                                                                     |
| NCBI Accession #                 | NP_000368.1                                                                              |
| NCBI GenBank Nucleotide #        | NM_000377.2                                                                              |
| UniProt Accession #              | P42768; Q9BU11; Q9UNJ9                                                                   |
| Molecular Weight                 | 52,913 Da                                                                                |
| NCBI Official Full Name          | wiskott-Aldrich syndrome protein                                                         |
| NCBI Official Synonym Full Names | Wiskott-Aldrich syndrome                                                                 |
| NCBI Official Symbol             | WAS                                                                                      |
| NCBI Official Synonym Symbols    | THC; IMD2; SCNX; THC1; WASP                                                              |
| NCBI Protein Information         | wiskott-Aldrich syndrome protein; eczema-thrombocytopenia; thrombocytopenia 1 (X-linked) |
| UniProt Protein Name             | Wiskott-Aldrich syndrome protein                                                         |
| UniProt Gene Name                | WAS                                                                                      |
| UniProt Synonym Gene Names       | IMD2; WASp                                                                               |
| UniProt Entry Name               | WASP_HUMAN                                                                               |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.