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Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody
Peptide-affinity purified goat antibody
Catalog # AF2159a

Specification

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - Product Information

Application	**WB, E**
Primary Accession	P42768
Other Accession	NP_000368, 7454
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**52913**

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - Additional Information

Gene ID 7454

Other Names
Wiskott-Aldrich syndrome protein, WASp, WAS, IMD2

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - Protein Information

Name WAS

Synonyms IMD2

Function

Effector protein for Rho-type GTPases that regulates actin filament reorganization via its interaction with the Arp2/3 complex (PubMed:12235133, PubMed:12769847, PubMed:16275905). Important for efficient actin polymerization (PubMed:12235133, PubMed:16275905, PubMed:8625410). Possible regulator of lymphocyte and platelet function (PubMed:9405671). Mediates actin filament reorganization and the formation of actin pedestals upon infection by pathogenic bacteria (PubMed:18650809). 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 (PubMed:20574068). Promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs) (PubMed:29925947).

Cellular Location
Cytoplasm, cytoskeleton. Nucleus

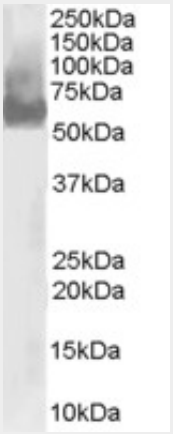
Tissue Location
Expressed predominantly in the thymus. Also found, to a much lesser extent, in the spleen.

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - Images



AF2159a staining (0.03 µg/ml) of U937 lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - Background

The Wiskott-Aldrich syndrome (WAS) family of proteins share similar domain structure, and are involved in transduction of signals from receptors on the cell surface to the actin cytoskeleton. The presence of a number of different motifs suggests that they are regulated by a number of different stimuli, and interact with multiple proteins. Recent studies have demonstrated that these proteins, directly or indirectly, associate with the small GTPase, Cdc42, known to regulate formation of actin filaments, and the cytoskeletal organizing complex, Arp2/3. Wiskott-Aldrich syndrome is a rare, inherited, X-linked, recessive disease characterized by immune dysregulation and microthrombocytopenia, and is caused by mutations in the WAS gene. The WAS gene product is a cytoplasmic protein, expressed exclusively in hematopoietic cells, which show signalling and cytoskeletal abnormalities in WAS patients. A transcript variant arising as a result of alternative promoter usage, and containing a different 5' UTR sequence, has been described, however, its full-length nature is not known.

Goat Anti-Wiskott-Aldrich Syndrome / WASP Antibody - References

A congenital activating mutant of WASp causes altered plasma membrane topography and adhesion under flow in lymphocytes. Burns SO, et al. Blood, 2010 Jul 1. PMID 20354175.
Customised molecular diagnosis of primary immune deficiency disorders in New Zealand: an efficient strategy for a small developed country. Ameratunga R, et al. N Z Med J, 2009 Oct 9. PMID 19859091.
Characterization of Wiskott-Aldrich syndrome (WAS) mutants using Saccharomyces cerevisiae. Rajmohan R, et al. FEMS Yeast Res, 2009 Dec. PMID 19817875.
Regulation of podosome dynamics by WASp phosphorylation: implication in matrix degradation and chemotaxis in macrophages. Dovas A, et al. J Cell Sci, 2009 Nov 1. PMID 19808890.
The mechanism of CSF-1-induced Wiskott-Aldrich syndrome protein activation in vivo: a role for phosphatidylinositol 3-kinase and Cdc42. Cammer M, et al. J Biol Chem, 2009 Aug 28. PMID 19561083.