

Anti-WASP Picoband Antibody

Catalog # ABO12148

### Specification

### Anti-WASP Picoband Antibody - Product Information

ApplicationWB, IHC-P, IHC-F, ICCPrimary AccessionP42768HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Wiskott-Aldrich syndrome protein(WAS) detection. Tested withWB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### **Anti-WASP Picoband Antibody - Additional Information**

Gene ID 7454

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

Calculated MW 52913 MW KDa

**Application Details** Immunocytochemistry , 0.5-1 μg/ml, Human, -<br>Immunohistochemistry(Frozen Section), 0.5-1 μg/ml, Human, -<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat<br>br>Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

**Subcellular Localization** Cytoplasm, cytoskeleton.

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

**Protein Name** Wiskott-Aldrich syndrome protein

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human WASP (129-156aa ADEDEAQAFRALVQEKIQKRNQRQSGDR), different from the related mouse sequence by two amino acids.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 CRIB domain.

## Anti-WASP Picoband 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:<a

href="http://www.uniprot.org/citations/12235133" target=" blank">12235133</a>, PubMed:<a href="http://www.uniprot.org/citations/12769847" target=" blank">12769847</a>, PubMed:<a href="http://www.uniprot.org/citations/16275905" target="\_blank">16275905</a>). Important for efficient actin polymerization (PubMed: <a href="http://www.uniprot.org/citations/12235133" target="\_blank">12235133</a>, PubMed:<a href="http://www.uniprot.org/citations/16275905" target=" blank">16275905</a>, PubMed:<a href="http://www.uniprot.org/citations/8625410" target=" blank">8625410</a>). Possible regulator of lymphocyte and platelet function (PubMed:<a href="http://www.uniprot.org/citations/9405671" target=" blank">9405671</a>). Mediates actin filament reorganization and the formation of actin pedestals upon infection by pathogenic bacteria (PubMed: <a href="http://www.uniprot.org/citations/18650809" target=" blank">18650809</a>). 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: <a href="http://www.uniprot.org/citations/20574068" target=" blank">20574068</a>). 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:<a href="http://www.uniprot.org/citations/29925947" target=" blank">29925947</a>).

**Cellular Location** Cytoplasm, cytoskeleton. Nucleus

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

### **Anti-WASP Picoband Antibody - Protocols**

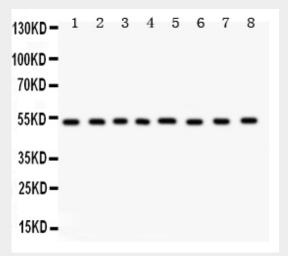
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>

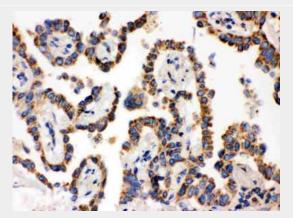


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-WASP Picoband Antibody - Images

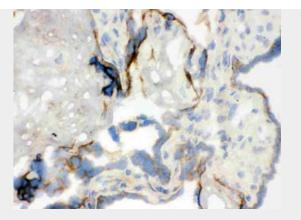


Anti- WASP Picoband antibody, ABO12148, Western blottingAll lanes: Anti WASP (ABO12148) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Human Placenta Tissue Lysate at 50ugLane 3: Rat Spleen Tissue Lysate at 50ugLane 4: Rat Pancreas Tissue Lysate at 50ugLane 5: HEPG2 Whole Cell Lysate at 40ugLane 6: HELA Whole Cell Lysate at 40ugLane 7: HEPA Whole Cell Lysate at 40ugLane 8: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 53KDObserved bind size: 53KD

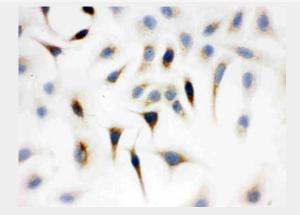


Anti- WASP Picoband antibody, ABO12148, IHC(P)IHC(P): Human Lung Cancer Tissue





Anti- WASP Picoband antibody, ABO12148, IHC(F)IHC(F): Human Placenta Tissue



Anti- WASP Picoband antibody, ABO12148, ICCICC: A549 Cell

# Anti-WASP Picoband 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.