Technical Data Sheet

Purified Mouse Anti-Human Wiskott-Aldrich Syndrome Protein

Product Information

Material Number: 557773
Alternate Name: WASP
Size: 0.1 mg
Concentration: 0.25 mg/ml
Clone: 5A5
Immunogen: Human WASP Recombinant Protein
Isotype: Mouse (BALB/c) IgG2a, κ
Reactivity: QC Testing: Human
Target MW: 60 kDa
Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Wiskott-Aldrich syndrome (WAS) is an X-linked recessive immunodeficiency disease caused by mutations in the gene encoding WAS protein (WASP). The disease is characterized by a spectrum of clinical signs, including thrombocytopenia, eczema, susceptibility to opportunistic and pyogenic infections, and B-cell lymphomas associated with Epstein-Barr virus. Furthermore, patients' blood cells display morphological abnormalities that can be associated with an impaired cytoskeleton. WASP is a member of a family of highly conserved proteins that link signaling pathways to the actin cytoskeleton. These members include WASP, N-WASP (neuronal), and SCAR/WAVE isoforms (Suppressor of cAMP Receptor/WASP family Verprolin-homologous protein) that share two main regions of homology: a proline-rich domain and a carboxyl terminal domain that binds to the Arp2/3 complex. The Arp2/3 complex initiates actin filament assembly in motile cells and formation of the immunological synapse between activated T lymphocytes and antigen-presenting cells. WASP is a central regulator of the actin cytoskeleton in hematopoietic cells that is itself regulated by multiple signaling pathways.

The 5A5 antibody recognizes human WASP; it does not cross react with N-WASP. It has been reported to detect WASP in lysates of hematopoietic cells and cell lines, except for neutrophils, from normal donors, but not from a group of patients having mutations of the WAS gene.

Western Blot analysis of WASP in human histiocytic lymphoma. Lysate from U937 cells (ATCC CRL-1593.2) was probed with Mouse anti-Human WASP monoclonal antibody at titrations of 0.5 (lane 1), 0.25 (lane 2), and 0.125 µg/ml (lane 3). WASP is identified as a band of 60 kDa.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4°C.
Application Notes

Application

| Western blot | Routinely Tested |
| Intracellular staining (flow cytometry) | Reported |
| Immunoprecipitation | Reported |
| Fluorescence microscopy | Reported |

Suggested Companion Products

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<tr>
<th>Catalog Number</th>
<th>Name</th>
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<tbody>
<tr>
<td>554002</td>
<td>HRP Goat Anti-Mouse Ig</td>
<td>1.0 ml</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References


Caron E. Regulation of Wiskott-Aldrich syndrome protein and related molecules. Curr Opin Cell Biol. 2002; 14:82-87 (Biology)

