Technical Data Sheet

Purified Mouse Anti-Human Wiskott-Aldrich Syndrome Protein

Product Information

Material Number: 557773 Alternate Name: WASP Size $0.1 \, \text{mg}$ 0.25 mg/ml Concentration: Clone: 5A5

Human WASP Recombinant Protein Immunogen:

Isotype: Mouse (BALB/c) IgG2a, κ Reactivity: QC Testing: Human

Target MW: 60 kDa

Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium Storage Buffer:

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 Ivmphoma. 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.

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Application Notes

Application

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

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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

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