

Product Information

Anti- WASH1

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200372**

Product Description

Anti-WASH1 is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal region of human WASH1 (GeneID: 100287171), conjugated to KLH. The corresponding sequence differs by one amino acid in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-WASH1 recognizes human, rat and mouse WASH1. The antibody may be used in various immunochemical techniques including immunoblotting (~72 kDa) and immunoprecipitation. Detection of the WASH1 band by immunoblotting is specifically inhibited by the immunizing peptide.

WASH1 (Wiskott-Aldrich Syndrome Protein and SCAR Homolog), a new member of the WASP family, is a nucleation-promoting factor at the surface of endosomes, where it recruits and activates the Arp2/3 complex to induce actin polymerization, playing a key role in the fission of endosomes. Similar to other WASP family members, it contains a C-terminal VCA domain that binds to actin and the Arp2/3 complex. In addition, WASH1 also contains a short proline-rich region, a unique N-terminal domain termed WASH-homology-domain (WAHD1), and a tubulin-binding region. Through its WAHD1 region, WASH1 interacts with FAM21, a protein that links WASH1 to endosomes. WASH1 forms part of a multiprotein complex composed of FAM21, KIAA1033 (SWIP), strumpellin and CCDC53. WASH1 associates with tubulin and localizes to early and recycling endosomes, where together with the Arp2/3 complex and actin, it is required for maintaining the shape of the endosomal compartment and the regulation of the retrograde transport.¹⁻⁴

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2-4 µg/mL is recommended using whole extracts of HEK-293T cells over-expressing mouse WASH1.

Immunoprecipitation: a working amount of 5-10 µg is recommended using lysates of rat NRK cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Gomez, T.S., and Billadeau, D.D., *Dev. Cell*, **17**, 699-711 (2009).
2. Derivery, E., et al., *Dev. Cell*, **17**, 712-723 (2009).
3. Duleh, S.N., and Welch, M.D., *Cytoskeleton*, **67**, 193-206 (2010).
4. Jia, D., et al., *Proc. Natl. Acad. Sci. USA*, **107**, 10442-10447 (2010).

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