

WASF1 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP14110c

Specification

WASF1 Antibody (Center) Blocking peptide - Product Information

Primary Accession

<u>Q92558</u>

WASF1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 8936

Other Names

Wiskott-Aldrich syndrome protein family member 1, WASP family protein member 1, Protein WAVE-1, Verprolin homology domain-containing protein 1, WASF1, KIAA0269, SCAR1, WAVE1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP14110c was selected from the Center region of WASF1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

WASF1 Antibody (Center) Blocking peptide - Protein Information

Name WASF1 (HGNC:12732)

Synonyms KIAA0269, SCAR1, WAVE1

Function

Downstream effector molecule involved in the transmission of signals from tyrosine kinase receptors and small GTPases to the actin cytoskeleton. Promotes formation of actin filaments. Part of the WAVE complex that regulates lamellipodia formation (PubMed:https://www.upipret.org/citations/20061568

href="http://www.uniprot.org/citations/29961568" target="_blank">29961568). The WAVE complex regulates actin filament reorganization via its interaction with the Arp2/3 complex (By similarity). As component of the WAVE1 complex, required for BDNF-NTRK2 endocytic trafficking and signaling from early endosomes (By similarity). Also involved in the regulation of mitochondrial dynamics (PubMed:29961568).



Cellular Location

Cytoplasm, cytoskeleton. Synapse {ECO:0000250|UniProtKB:Q5BJU7} Cell junction, focal adhesion. Note=Dot- like pattern in the cytoplasm. Concentrated in Rac-regulated membraneruffling areas (PubMed:9889097). Partial translocation to focal adhesion sites might be mediated by interaction with SORBS2 (PubMed:18559503). In neurons, colocalizes with activated NTRK2 after BDNF addition in endocytic sites through the association with TMEM108 (By similarity). {ECO:0000250|UniProtKB:Q8R5H6, ECO:0000269|PubMed:18559503, ECO:0000269|PubMed:9889097}

Tissue Location

Highly expressed in brain. Lowly expressed in testis, ovary, colon, kidney, pancreas, thymus, small intestine and peripheral blood

WASF1 Antibody (Center) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

WASF1 Antibody (Center) Blocking peptide - Images

WASF1 Antibody (Center) Blocking peptide - Background

The protein encoded by this gene, a member of theWiskott-Aldrich syndrome protein (WASP)-family, plays a criticalrole downstream of Rac, a Rho-family small GTPase, in regulatingthe actin cytoskeleton required for membrane ruffling. It has beenshown to associate with an actin nucleation core Arp2/3 complexwhile enhancing actin polymerization in vitro.

Wiskott-Aldrichsyndrome is a disease of the immune system, likely due to defects regulation of actin cytoskeleton. Multiple alternatively splicedtranscript variants encoding the same protein have been found forthis gene.

WASF1 Antibody (Center) Blocking peptide - References

Namekata, K., et al. Proc. Natl. Acad. Sci. U.S.A. 107(16):7586-7591(2010)Roignot, J., et al. Cancer Lett. 288(1):116-123(2010)Kang, R., et al. Leukemia 24(1):177-186(2010)Takata, K., et al. Am. J. Pathol. 175(1):17-24(2009)He, Y.L., et al. Zhongguo Dang Dai Er Ke Za Zhi 11(2):88-92(2009)