



# WAVE1 (phospho Tyr125) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03043
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	WASF1
<b>Protein Name</b>	Wiskott-Aldrich syndrome protein family member 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human WAVE1 around the phosphorylation site of Tyr125. AA range:91-140
<b>Specificity</b>	Phospho-WAVE1 (Y125) Polyclonal Antibody detects endogenous levels of WAVE1 protein only when phosphorylated at Y125.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	WASF1; KIAA0269; SCAR1; WAVE1; Wiskott-Aldrich syndrome protein family member 1; WASP family protein member 1; Protein WAVE-1; Verprolin homology domain-containing protein 1
<b>Observed Band</b>	70kD
<b>Cell Pathway</b>	Cytoplasm, cytoskeleton . Cell junction, synapse . Cell junction, focal adhesion . Dot-like pattern in the cytoplasm. Concentrated in Rac-regulated membrane-ruffling 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).
<b>Tissue Specificity</b>	Highly expressed in brain. Lowly expressed in testis, ovary, colon, kidney, pancreas, thymus, small intestine and peripheral blood.
<b>Function</b>	domain: Binds the Arp2/3 complex through the C-terminal region and actin through verprolin homology (VPH) domain.,function: Downstream effector molecules involved in the transmission of signals from tyrosine kinase receptors and small GTPases to the actin cytoskeleton.,similarity: Belongs to the SCAR/WAVE family.,similarity: Contains 1 WH2 domain.,subcellular location: Dot-like pattern in the cytoplasm. Concentrated in Rac-regulated membrane-ruffling areas.,subunit: Component of the WAVE1 complex composed of ABI2, CYFIP2,



C3orf10/HSPC300, NCKAP1 and WASF1/WAVE1. CYFIP2 binds to activated RAC1 which causes the complex to dissociate, releasing activated WASF1. The complex can also be activated by NCK1 (By similarity). Binds actin and the Arp2/3 complex. Interacts with BAIAP2.,tissue specificity:Highly expressed in brain. Lowly expressed in testis, ovary, colon, kidney, pancreas, thymus, small in

**Background**

The protein encoded by this gene, a member of the Wiskott-Aldrich syndrome protein (WASP)-family, plays a critical role downstream of Rac, a Rho-family small GTPase, in regulating the actin cytoskeleton required for membrane ruffling. It has been shown to associate with an actin nucleation core Arp2/3 complex while enhancing actin polymerization in vitro. Wiskott-Aldrich syndrome is a disease of the immune system, likely due to defects in regulation of actin cytoskeleton. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008],

**matters needing attention**

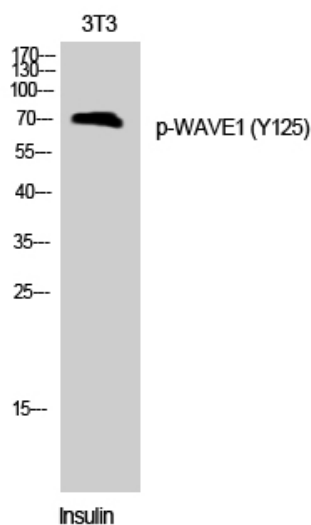
Avoid repeated freezing and thawing!

**Usage suggestions**

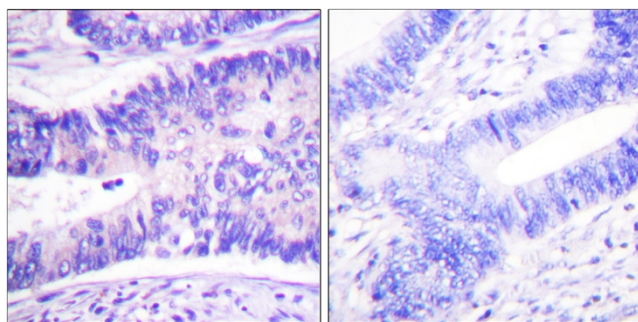
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



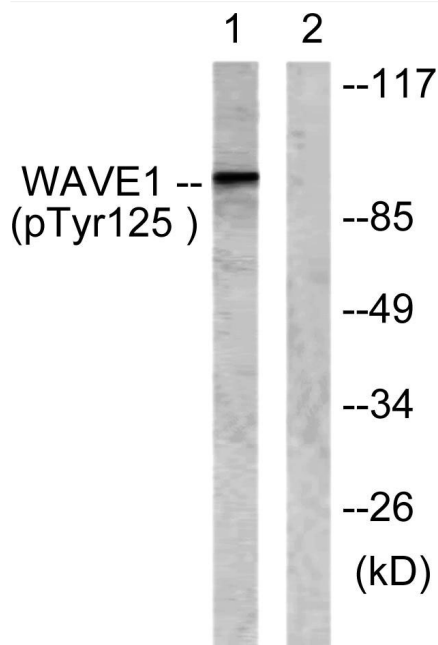
## Products Images



Western Blot analysis of 3T3 cells using Phospho-WAVE1 (Y125) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using WAVE1 (Phospho-Tyr125) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with Insulin 0.01U/ml 15', using WAVE1 (Phospho-Tyr125) Antibody. The lane on the right is blocked with the phospho peptide.