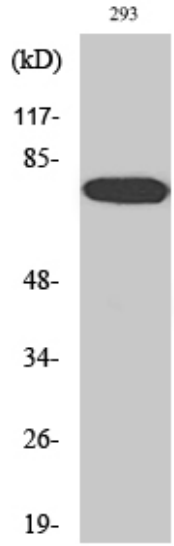
WAVE1 Polyclonal Antibody

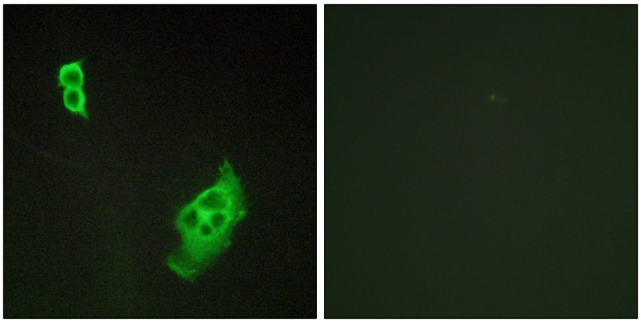
Catalog No	BYab-03214
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	WASF1
Protein Name	Wiskott-Aldrich syndrome protein family member 1
Immunogen	The antiserum was produced against synthesized peptide derived from human WAVE1. AA range:91-140
Specificity	WAVE1 Polyclonal Antibody detects endogenous levels of WAVE1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	70kD
Cell Pathway	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). .
Tissue Specificity	Highly expressed in brain. Lowly expressed in testis, ovary, colon, kidney, pancreas, thymus, small intestine and peripheral blood.
Function	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.

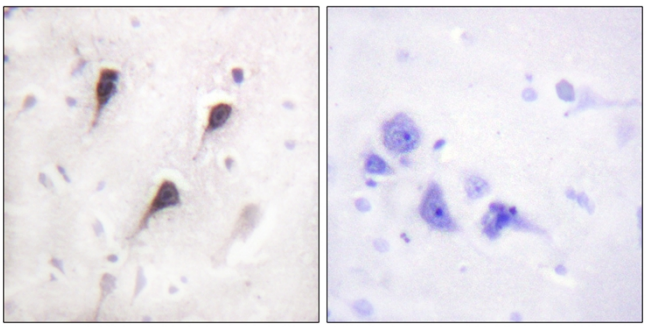
Products Images



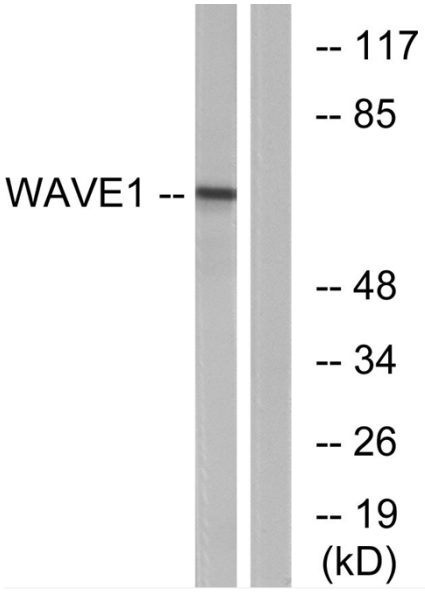
Western Blot analysis of various cells using WAVE1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of COS7 cells, using WAVE1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using WAVE1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with insulin 0.01U/ml 15', using WAVE1 Antibody. The lane on the right is blocked with the synthesized peptide.