

Rabbit PAK4 Polyclonal Antibody | anti-PAK4 antibody

PAK4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326822	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PAK4; Polyclonal Antibody; PAK4 Antibody; KIAA1142; p21 activated kinase 4; p21 Cdc42/Rac1-actiated kinase 4; P21 protein (Cdc42/Rac) activated kinase 4; p21(CDKN1A) activated kinase 4; p21-activated kinase 4; PAK 4; PAK-4; Pak4; PAK4_HUMAN; Protein kinase related to S.cerevisiae STE20 effector for Cdc42Hs; Serine threonine kinase PAK 4; Serine/threonine protein kinase PAK 4; Serine/threonine protein kinase PAK4; Serine/threonine-protein kinase PAK 4; anti-PAK4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PAK4 antibody detects endogenous levels of total PAK4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	591
Applicable Applications for anti-PAK4 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Fusion protein of human PAK4
Tissue Specificity	Highest expression in prostate, testis and colon.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts of HT-29 cell line, using PAK4 antibody



IHC (Immunohistochemistry)

AAA326822 at 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PAK4 antibody

Description: PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 interacts specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family of MAP kinases. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

Function: Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, growth, proliferation or cell survival. Activation by various effectors including growth factor receptors or active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates and inactivates the protein phosphatase SSH1, leading to increased inhibitory phosphorylation of the actin binding/depolymerizing factor cofilin. Decreased cofilin activity may lead to stabilization of actin filaments. Phosphorylates LIMK1, a kinase that also inhibits the activity of cofilin. Phosphorylates integrin beta5/ITGB5 and thus regulates cell motility. Phosphorylates ARHGEF2 and activates the downstream target RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers. Stimulates cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Alternatively, inhibits apoptosis by preventing caspase-8 binding to death domain receptors in a kinase independent manner. Plays a role in cell-cycle progression by controlling levels of the cell-cycle regulatory protein CDKN1A and by phosphorylating RAN.

Subunit Structure: Interacts with FGFR2 and GRB2 (By similarity). Interacts tightly with GTP-bound but not GDP-bound CDC42/p21 and weakly with RAC1 (PubMed:15827085). Interacts with FAM212A/INKA1 (PubMed:26607847).

Post-translational Modifications: Autophosphorylated on serine residues when activated by CDC42/p21.

Phosphorylated on tyrosine residues upon stimulation of FGFR2.

Similarity: Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	62422554
NCBI GeneID	10298
NCBI Accession #	NP_001014831.1
NCBI GenBank Nucleotide #	NM_001014831.2
UniProt Accession #	O96013; Q8N4E1; Q8NCH5; Q8NDE3; Q9BU33; Q9ULS8; B4DGG6
Molecular Weight	Observed: 64 kD Predicted: 65 kDa
NCBI Official Full Name	serine/threonine-protein kinase PAK 4 isoform 1
NCBI Official Synonym Full Names	p21 (RAC1) activated kinase 4
NCBI Official Symbol	PAK4
NCBI Protein Information	serine/threonine-protein kinase PAK 4
UniProt Protein Name	Serine/threonine-protein kinase PAK 4
UniProt Gene Name	PAK4
UniProt Synonym Gene Names	KIAA1142; PAK-4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pak4-antibody-immunohistochemistry-western-blot-elisa/326822>