

Rabbit anti-Human, mouse PAK4 Polyclonal Antibody | anti-PAK4 antibody

PAK4 Antibody (N-term)

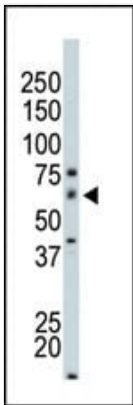
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA286604	Rabbit	Human, mouse	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

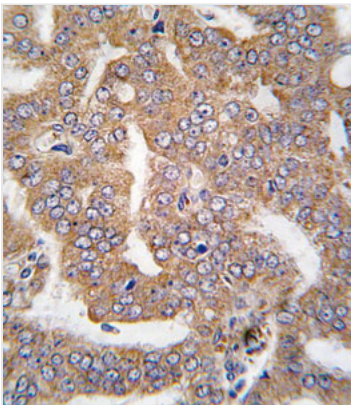
PAK4; Polyclonal Antibody; PAK4 Antibody (N-term); Serine/threonine-protein kinase PAK 4; p21-activated kinase 4; PAK-4; KIAA1142; anti-PAK4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This PAK4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-187 amino acids from the N-terminal region of human PAK4.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Sequence Positions	156-187
Sequence Length	501
Applicable Applications for anti-PAK4 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Calculated MW	64072
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.
Cellular Location	Cytoplasm. Note=Seems to shuttle between cytoplasmic compartments depending on the activating effector. For example, can be found on the cell periphery after activation of growth-factor or integrin-mediated signaling pathways.
Tissue Location	Highest expression in prostate, testis and colon.
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)
The anti-PAK4 Pab is used in Western blot to detect PAK4 in mouse small intestine tissue lysate.



IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human prostata carcinoma tissue reacted with PAK4 antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ADDITIONAL INFORMATION

Related Product Information for anti-PAK4 antibody	PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3, PAK4, PAK5, and PAK6. PAK proteins 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.
Product Categories/Family for anti-PAK4 antibody	Cancer; Cell Biology; Signal transduction
References	Lu, Y., et al., J. Biol. Chem. 278(12):10374-10380 (2003). Bagrodia, S., et al., Trends Cell Biol. 9(9):350-355 (1999). Abo, A., et al., EMBO J. 17(22):6527-6540 (1998).

NCBI AND UNIPROT INFORMATION

NCBI GI #	62422554
NCBI GeneID	10298
NCBI Accession #	NP_001014831.1; NP_001014832.1; NP_001014834.1; NP_001014835.1; NP_005875.1
NCBI GenBank Nucleotide #	NM_001014831.2
UniProt Accession #	O96013; Q8N4E1; Q8NCH5; Q8NDE3; Q9BU33; Q9ULS8; B4DGG6
NCBI Official Full Name	serine/threonine-protein kinase PAK 4 isoform 1
NCBI Official Synonym Full Names	p21 protein (Cdc42/Rac)-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
UniProt Entry Name	PAK4_HUMAN

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-western-blot-immunohistochemistry-elisa/286604>