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PAK5 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7930a

Product Information

Application	IHC-P, WB, IHC-P-Leica, E
Primary Accession	Q9P286
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1235
Calculated MW	80745
Antigen Region	168-198

Additional Information

Gene ID	57144
Other Names	Serine/threonine-protein kinase PAK 7, p21-activated kinase 5, PAK-5, p21-activated kinase 7, PAK-7, PAK7, KIAA1264, PAK5
Target/Specificity	This PAK5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-198 amino acids from human PAK5.
Dilution	IHC-P~~1:100 WB~~1:1000 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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.
Precautions	PAK5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PAK5 (HGNC:15916)
Synonyms	KIAA1264, PAK7
Function	Serine/threonine protein kinase that plays a role in a variety of different

	signaling pathways including cytoskeleton regulation, cell migration, 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 the proto-oncogene RAF1 and stimulates its kinase activity. Promotes cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Phosphorylates CTNND1, probably to regulate cytoskeletal organization and cell morphology. Keeps microtubules stable through MARK2 inhibition and destabilizes the F-actin network leading to the disappearance of stress fibers and focal adhesions.
Cellular Location	Mitochondrion. Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the mitochondria, and mitochondrial localization is essential for the role in cell survival
Tissue Location	Predominantly expressed in brain.

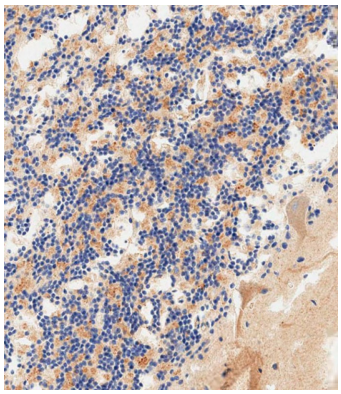
Background

PAK5 is a member of the PAK family of Ser/Thr protein kinases. PAK family members are known to be effectors of Rac/Cdc42 GTPases, which have been implicated in the regulation of cytoskeletal dynamics, proliferation, and cell survival signaling. This kinase contains a CDC42/Rac1 interactive binding (CRIB) motif, and has been shown to bind CDC42 in the presence of GTP. This kinase is predominantly expressed in brain. It is capable of promoting neurite outgrowth, and thus may play a role in neurite development. This kinase is associated with microtubule networks and induces microtubule stabilization. The subcellular localization of this kinase is tightly regulated during cell cycle progression.

References

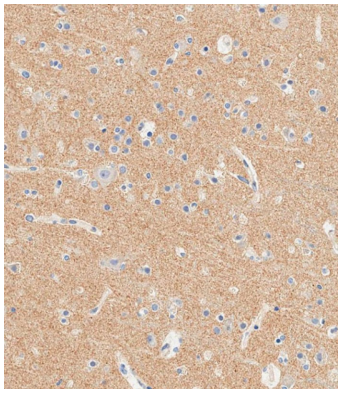
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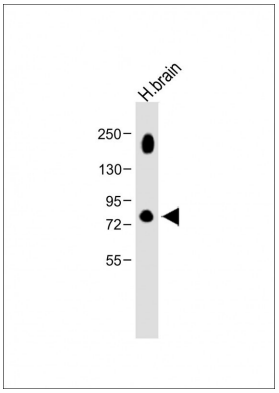
Images



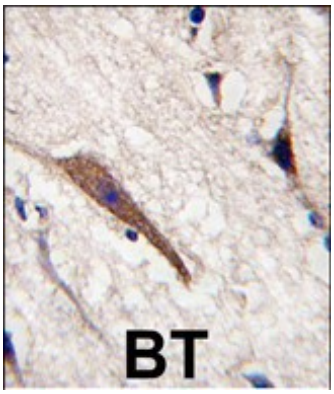
Immunohistochemical analysis of paraffin-embedded human cerebellum tissue using AP7930A performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded human brain tissue using AP7930A performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.





Anti-PAK5 Antibody at 1:2000 dilution + Human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 81 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with PAK5 antibody, 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.