

**PAK5 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7930a**

**Specification**

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**PAK5 Antibody - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">O9P286</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>168-198</b>

**PAK5 Antibody - 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**

WB~~1:1000  
IHC-P~~1:100

**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.

**PAK5 Antibody - 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

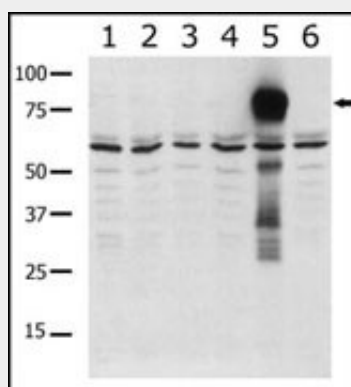
Predominantly expressed in brain.

### PAK5 Antibody - Protocols

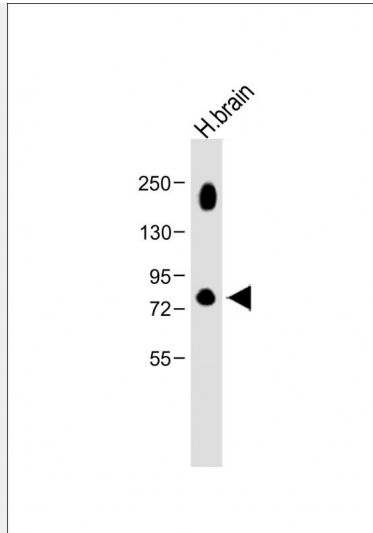
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

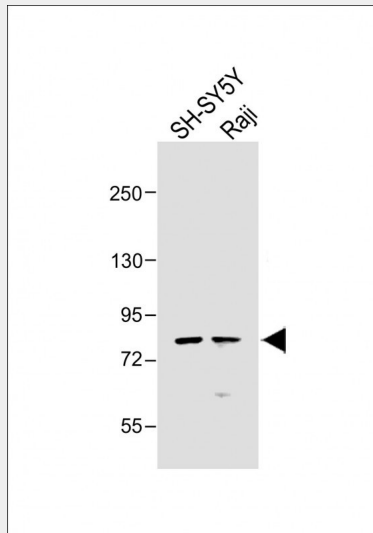
### PAK5 Antibody - Images



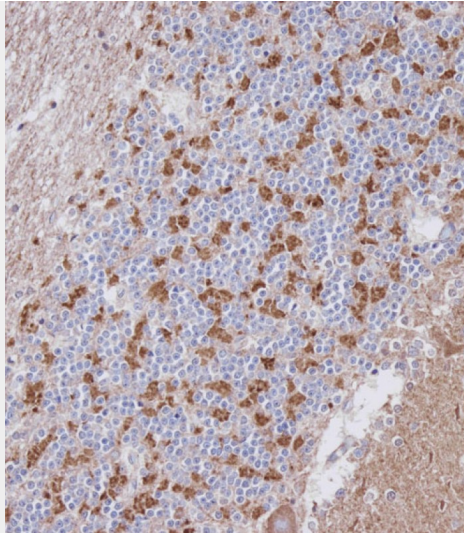
Western blot analysis of anti-PAK5 Pab (Cat. #AP7930a) in lysates from transiently transfected COS7 cells. Lane 1: negative control, Lane 2: PAK1-expressing cells, Lane 3: PAK2-expressing cells, Lane 4: PAK4-expressing cells, Lane 5: PAK5-expressing cells, and Lane 6: PAK6-expressing cells. PAK5 (arrow) was detected using purified Pab. Data is kindly provided by Drs. Z.M. Jaffer and J. Chernoff from the Fox Chase Cancer Center (Philadelphia, PA).



Anti-PAK5 Antibody at 1:2000 dilution + Human brain lysate Lysates/proteins at 20  $\mu$ g 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.



All lanes : Anti-PAK5 Antibody at 1:1000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20  $\mu$ g 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.



Immunohistochemical analysis of AP7930A on paraffin-embedded Human cerebellum tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

#### **PAK5 Antibody - 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.

#### **PAK5 Antibody - References**

Jaffer, Z.M., et al., *Int. J. Biochem. Cell Biol.* 34(7):713-717 (2002).  
Pandey, A., et al., *Oncogene* 21(24):3939-3948 (2002).  
Dan, C., et al., *Mol. Cell. Biol.* 22(2):567-577 (2002).  
Cau, J., et al., *J. Cell Biol.* 155(6):1029-1042 (2001).