

Datasheet for 600-401-DJ4**PAK5 Antibody****Overview**

Description:	Anti-PAK5 (RABBIT) Antibody - 600-401-DJ4
Item No.:	600-401-DJ4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details**Background:**

The p21-activated kinases (PAKs) are serine-threonine kinases that bind to the active forms of Cdc42 and Rac. They are divided into two groups, the first of which include PAK1, 2 and 3, and can be activated by Cdc42/Rac binding. Group 1 PAKs contain an autoinhibitory domain whose activity is regulated by Cdc42/Rac binding. The group 1 PAKs are known to be involved in cellular processes such as gene transcription, apoptosis, and cell morphology and motility. Much less is known about the second group, which includes PAK4, 5 and 6. These proteins are not activated by Cdc42/Rac binding. PAK5 was initially identified as a kinase expressed primarily in brain that while possessing a kinase domain and GTPase binding domain similar to PAK4 and PAK6, is completely different from both. Expression of PAK5 in neural based cell lines resulted in neurite outgrowth suggesting that PAK5 may be involved in regulating the cytoskeletal changes necessary for promoting neurite outgrowth. Other experiments suggest that unlike the other PAKs, PAK5 may inhibit apoptosis by phosphorylating the Bcl-2 family member Bad.

Synonyms:	PAK5 Antibody, PAK5, KIAA1264, PAK5, p21-activated kinase 5, PAK-5
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PAK5
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-PAK5 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 13 amino acid synthetic peptide from near the internal region of human PAK5.
Purity/Specificity:	Anti-PAK5 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with PAK5 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9P286 • GenelD - 57144 • NCBI - Q9P286

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PAK5 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 81 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000-1:40,000
IF:	10 µg/mL
WB:	2-4 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

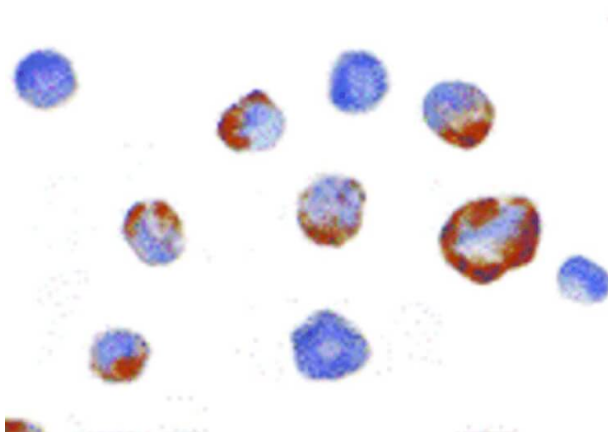
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

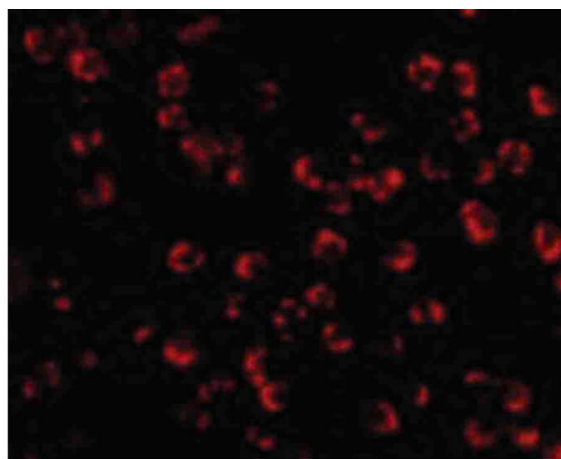
Expiration: Expiration date is one (1) year from date of receipt.

Images



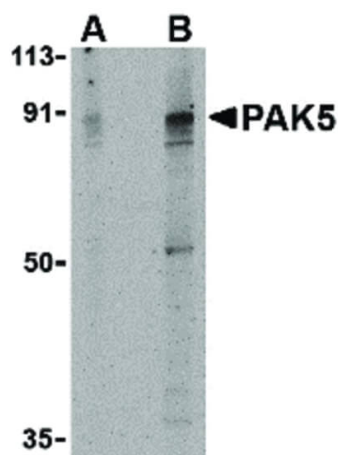
Immunohistochemistry

Immunocytochemistry of PAK5 antibody. Cell Type: K562 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: PAK5 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PAK5 is located in the mitochondrion, cytoplasm, and nucleus. Staining: PAK5 is stained brown with hematoxylin purple counterstain.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of PAK5 antibody. Cell Type: K562 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: PAK5 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PAK5 is located in the mitochondrion, cytoplasm, and nucleus. Staining: PAK5 as red fluorescent signal.



Western Blot

Western Blot of PAK5 antibody. Lane A: T24 lysate at 2 $\mu\text{g}/\text{ml}$. Lane B: T24 lysate at 4 $\mu\text{g}/\text{ml}$. Load: 35 μg per lane. Primary antibody: PAK5 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 81 kDa, 91 kDa for PAK5. Other band(s): PAK5 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.