Datasheet for 600-401-DJ2

PAK2 Antibody

Overview

Description:	Anti-PAK2 (RABBIT) Antibody - 600-401-DJ2
Item No.:	600-401-DJ2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
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, and are not activated by Cdc42/Rac binding. Of the six PAK proteins, only PAK2 is ubiquitously expressed and cleaved by caspase-3. This cleavage removes the amino-terminal regulatory domain and generates a constitutively active kinase fragment. Recent experiments have shown that following cleavage, the active fragment is myristoylated and directed to the plasma membrane and membrane ruffles where it promotes cell death via increased signaling through the c-Jun N-terminal kinase pathway, but without compromising mitochondrial integrity.
Synonyms:	PAK2 Antibody, PAK65, PAKgammaGamma-PAK, PAK-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PAK2
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-PAK2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide from near the N-terminus of human PAK2.
Purity/Specificity:	Anti-PAK2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with PAK2 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q13177 • GeneID - 5062 • NCBI - NP_002568

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PAK2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 58 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:	1:5,000 - 1:20,000
IF:	20 µg/mL
IHC:	10 µg/mL
WB:	.5-2 µg/mL

Formulation

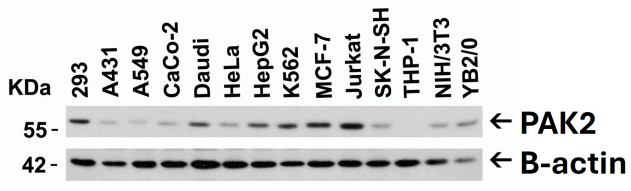
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

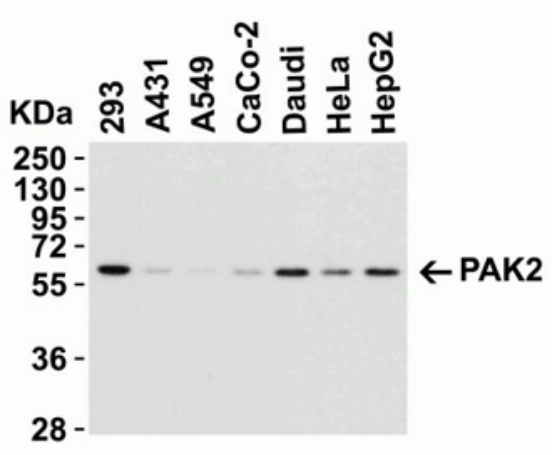
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

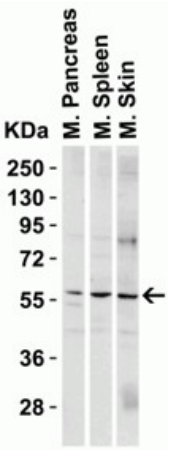
Images



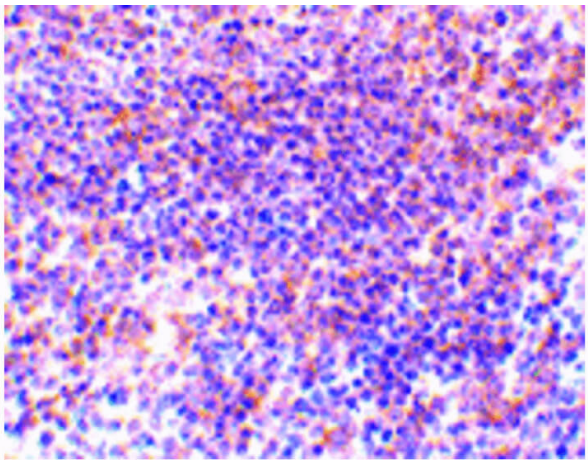
Western Blot
Western Blot using PAK2. Loading: 15 µg of lysates per lane. Antibodies: PAK2 (1 µg/mL), and beta-actin (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



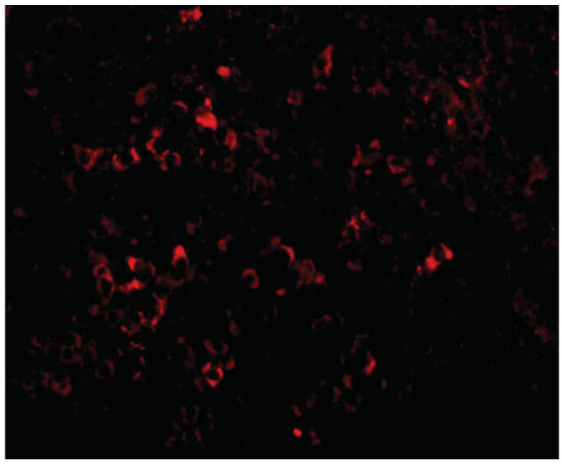
Western Blot
Western Blot using PAK2. Loading: 15 µg of human cell lysates per lane. Antibodies: PAK2 (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



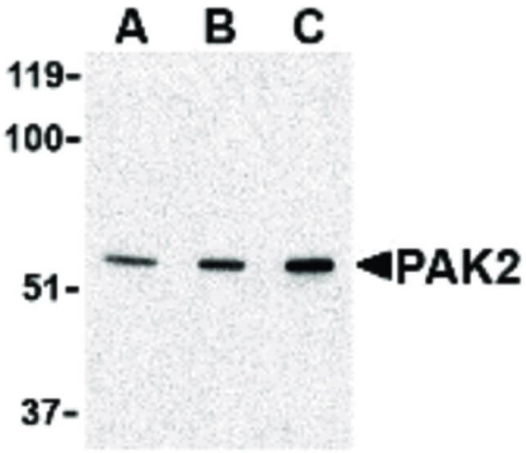
Western Blot
Western Blot Validation. Loading: 15 µg of mouse tissue lysates per lane. Antibodies: PAK2 (1 µg/mL per lane), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry
Immunohistochemistry of PAK2 antibody. Tissue: mouse spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: PAK2 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PAK2 is located in the cytoplasm, cell membrane, and nucleus. Staining: PAK2 is stained with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of PAK2 antibody. Tissue: mouse spleen tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: PAK2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PAK2 is located in the cytoplasm, cell membrane, and nucleus. Staining: PAK2 as red fluorescent signal.



Western Blot

Western Blot of PAK2 antibody in Jurkat lysate. Lane A: PAK2 antibody at 0.5 µg/mL. Lane B: PAK2 antibody at 1 µg/mL. Lane C: PAK2 antibody at 2 µg/mL Load: 35 µg per lane. Primary antibody: PAK2 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: 58 kDa, 55 kDa for PAK2. Other band(s): PAK2 splice variants and isoforms.

Disclaimer

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