

## PAK6 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7931a

### Specification

# PAK6 Antibody - Product Information

Application	WB,E
Primary Accession	<u>Q9NQU5</u>
Other Accession	<u>NP_064553</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	74869
Antigen Region	116-146

## PAK6 Antibody - Additional Information

Gene ID 106821730;56924

**Other Names** Serine/threonine-protein kinase PAK 6, PAK-5, p21-activated kinase 6, PAK-6, PAK6, PAK5

Target/Specificity

This PAK6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 116-146 amino acids from human PAK6.

Dilution WB~~1:1000

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.

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** PAK6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **PAK6 Antibody - Protein Information**

Name PAK6

Synonyms PAK5

Function Serine/threonine protein kinase that plays a role in the regulation of gene transcription.



The kinase activity is induced by various effectors including AR or MAP2K6/MAPKK6. Phosphorylates the DNA-binding domain of androgen receptor/AR and thereby inhibits ARmediated transcription. Inhibits also ESR1-mediated transcription. May play a role in cytoskeleton regulation by interacting with IQGAP1. May protect cells from apoptosis through phosphorylation of BAD.

### **Cellular Location**

Cytoplasm. Nucleus. Note=Cotranslocates into nucleus with AR in response to androgen induction

#### Tissue Location

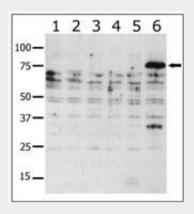
Selectively expressed in brain and testis, with lower levels in multiple tissues including prostate and breast

### PAK6 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### PAK6 Antibody - Images



Western blot analysis of anti-PAK6 Pab (Cat. #AP7931a) 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. PAK6 (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).

### PAK6 Antibody - Background

The PAK6 protein shares a high degree of sequence similarity with p21-activated kinase (PAK) family members. The proteins of this family are Rac/Cdc42-associated Ste20-like Ser/Thr protein kinases, characterized by a highly conserved amino-terminal Cdc42/Rac interactive binding (CRIB) domain and a carboxyl-terminal kinase domain. PAK kinases are implicated in the regulation of a number of cellular processes, including cytoskeleton rearrangement, apoptosis and the MAP kinase signaling pathway. PAK6 was found to interact with androgen receptor (AR), which is a steroid



hormone-dependent transcription factor that is important for male sexual differentiation and development. The p21-activated protein kinase 6 gene was found to be highly expressed in testis and prostate tissues and the encoded protein was shown to cotranslocate into the nucleus with AR in response to androgen.

### **PAK6 Antibody - References**

Ching, Y.P., et al., J. Biol. Chem. 278(36):33621-33624 (2003). Pandey, A., et al., Oncogene 21(24):3939-3948 (2002). Yang, F., et al., J. Biol. Chem. 276(18):15345-15353 (2001).