

# PAK6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12164C

#### **Product Information**

Application WB, IHC-P, IF, E Primary Accession Q9NQU5

Other Accession NP\_001122100.1

Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB31991
Calculated MW 74869
Antigen Region 268-297

## **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 268-297 amino acids from the Central

region of human PAK6.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 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** PAK6 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **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 AR- mediated transcription. Also inhibits 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

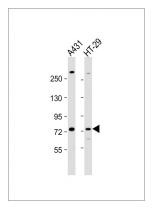
## **Background**

This gene encodes a member of the p21-activated kinase (PAK) family. 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. The protein encoded by this gene 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. This 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. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq].

### References

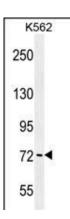
Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010) Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010) Lee, E.J., et al. Oncol. Res. 18(9):401-408(2010) Hosgood, H.D. III, et al. Respir Med 103(12):1866-1870(2009) Shen, M., et al. Environ. Mol. Mutagen. 50(4):285-290(2009)

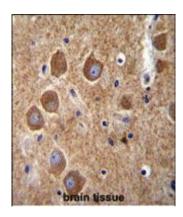
# **Images**



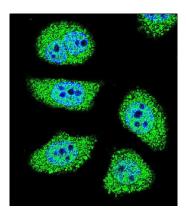
All lanes: Anti-PAK6 Antibody (Center) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: HT-29 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 75 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PAK6 Antibody (Center) (Cat. #AP12164c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the PAK6 antibody detected the PAK6 protein (arrow).





PAK6 Antibody (Center) (Cat. #AP12164c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PAK6 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of PAK6 Antibody (Center)(Cat#AP12164c) with U-251MG cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

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