10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PAK6 Antibody

Catalog # ASC10181

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NQU5
Other Accession	NP_064553, 9910476
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	74869
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PAK6 antibody can be used for the detection of PAK6 by Western blot at 1 - 4 g/mL. Antibody can also be used for immunohistochemistry starting at 10 g/mL. For immunofluorescence start at 10 g/mL.

Additional Information

Gene ID	56924
Other Names	PAK6 Antibody: PAK5, PAK5, PAK-5, PAK-6, p21 protein (Cdc42/Rac)-activated kinase 6
Target/Specificity	PAK6; PAK6 antibody is predicted to not cross-react with other PAK family proteins.
Reconstitution & Storage	PAK6 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PAK6 Antibody 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

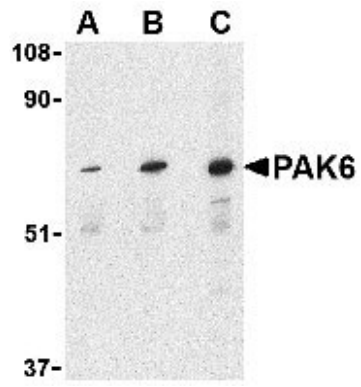
Background

PAK6 Antibody: 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. PAK6 was initially identified as an androgen receptor in a yeast two hybrid screen and was found to be highly expressed in testis and prostate tissues. Later experiments have shown it to be activated by MAP kinase kinase 6 and p38 MAP kinase, suggesting that PAK6 may play a role in the cellular response to stress-related signals.

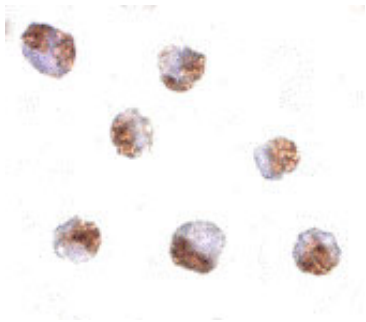
References

Jaffer ZM and Chernoff J. p21-activated kinases: three more join the Pak. Int. J. Biochem. Cell Biol. 2002; 34:713-7.
Yang F, Li X, Sharma M, et al. Androgen receptor specifically interacts with a novel p21-activated kinase, PAK6. J. Biol. Chem. 2001; 276:15345-53.
Kaur R, Liu X, Gjoerup O, et al. Activation of p21-activated kinase 6 by MAP kinase kinase 6 and p38 MAP kinase. J. Biol. Chem. 2005; 280:3323-30.

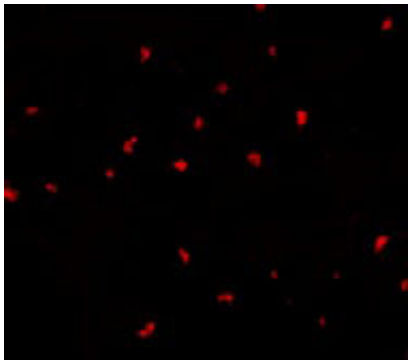
Images



Western blot analysis of PAK6 in Raji lysate with PAK6 antibody at (A) 1, (B) 2, and (C) 4 µg/mL.



Immunocytochemistry of PAK6 in Raji cells with PAK6 antibody at 10 µg/mL.



Immunofluorescence of PAK6 in Raji cells with PAK6 antibody at 10 µg/mL.

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