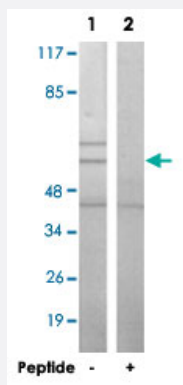


PAK1/PAK2/PAK3 polyclonal antibody

Catalog # PAB18202

Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, using PAK1/PAK2/PAK3 polyclonal antibody (Cat # PAB18202).

Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PAK1/PAK2/PAK3.
Immunogen	A synthetic peptide corresponding to residues surrounding T423/T402/T421 of human PAK1/PAK2/PAK3.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PAK1/PAK2/PAK3.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:20000) The optimal working dilution should be determined by the end user.

Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, using PAK1/PAK2/PAK3 polyclonal antibody (Cat # PAB18202).
Peptide "+" means "peptide blocking".

- Immunohistochemistry
- Enzyme-linked Immunoabsorbent Assay

Gene Info — PAK1

Entrez GeneID	5058
Gene Name	PAK1
Gene Alias	MGC130000, MGC130001, PAKalpha
Gene Description	p21 protein (Cdc42/Rac)-activated kinase 1
Omim ID	602590
Gene Ontology	Hyperlink
Gene Summary	PAK proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nuclear signaling. PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4. These proteins serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK1 regulates cell motility and morphology. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]
Other Designations	STE20 homolog, yeast p21-activated kinase 1 p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog, yeast) p21/Cdc42/Rac1-activated kinase 1 (yeast Ste20-related)

Gene Info — PAK2

Entrez GeneID	5062
Gene Name	PAK2
Gene Alias	PAK65, PAKgamma
Gene Description	p21 protein (Cdc42/Rac)-activated kinase 2
Omim ID	605022
Gene Ontology	Hyperlink
Gene Summary	The p21 activated kinases (PAK) are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. The PAK proteins are a family of serine/threonine kinases that serve as targets for the small GTP binding proteins, CDC42 and RAC1, and have been implicated in a wide range of biological activities. The protein encoded by this gene is activated by proteolytic cleavage during caspase-mediated apoptosis, and may play a role in regulating the apoptotic events in the dying cell. [provided by RefSeq]
Other Designations	S6/H4 kinase p21 (CDKN1A)-activated kinase 2 p21-activated kinase 2

Gene Info — PAK3

Entrez GeneID	5063
Gene Name	PAK3
Gene Alias	CDKN1A, MRX30, MRX47, OPHN3, PAK3beta, bPAK, hPAK3
Gene Description	p21 protein (Cdc42/Rac)-activated kinase 3
Omim ID	300142 300558
Gene Ontology	Hyperlink
Gene Summary	PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. PAK proteins, a family of serine/threonine p21-activating kinases, serve as targets for the small GTP binding proteins Cdc42 and RAC and have been implicated in a wide range of biological activities. The protein encoded by this gene forms an activated complex with GTP-bound RAS-like (P21), CDC2 and RAC1 proteins which then catalyzes a variety of targets. This protein may be necessary for dendritic development and for the rapid cytoskeletal reorganization in dendritic spines associated with synaptic plasticity. Defects in this gene are the cause of non-syndromic mental retardation X-linked type 30 (MRX30), also called X-linked mental retardation type 47 (MRX47). Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq]
Other Designations	OTTHUMP00000023855 OTTHUMP00000062894 beta-PAK oligophrenin-3 p21 (CDKN1A)-activated kinase 3 p21-activated kinase 3 p21-activated kinase-3 serine/threonine-protein kinase PAK 3

Publication Reference

- [Regulation of the interaction of Pak2 with Cdc42 via autophosphorylation of serine 141.](#)

Jung JH, Traugh JA.

The Journal of Biological Chemistry 2005 Dec; 280(48):40025.

Application: IP, WB-Re, Human, HEK 293T cells, Recombinant protein

- [The mental retardation protein PAK3 contributes to synapse formation and plasticity in hippocampus.](#)

Boda B, Alberi S, Nikonenko I, Node-Langlois R, Jourdain P, Moosmayer M, Parisi-Jourdain L, Muller D.

Journal of Neuroscience 2004 Dec; 24(48):10816.

Application: IF, Rat, Rat organotypic hippocampal slice cultures

- [DNA synthesis and neuronal apoptosis caused by familial Alzheimer disease mutants of the amyloid precursor protein are mediated by the p21 activated kinase PAK3.](#)

McPhie DL, Coopersmith R, Hines-Peralta A, Chen Y, Iins KJ, Manly SP, Kozłowski MR, Neve KA, Neve RL.

The Journal of Neuroscience 2003 Jul; 23(17):6914.

Application: IF, WB, Rat, Brain, Neuronal

Pathway

- [Axon guidance](#)
- [Axon guidance](#)
- [Axon guidance](#)
- [Chemokine signaling pathway](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Focal adhesion](#)

- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Regulation of actin cytoskeleton](#)
- [Regulation of actin cytoskeleton](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [Renal cell carcinoma](#)
- [Renal cell carcinoma](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)

Disease

- [Carcinoma](#)
- [Chronic Disease](#)
- [Cognition Disorders](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [HIV Infections](#)
- [Neuropsychological Tests](#)
- [Schizophrenia](#)
- [Schizophrenia](#)

- [Tobacco Use Disorder](#)