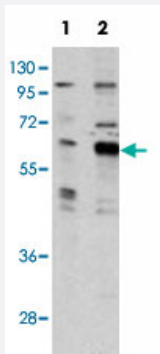


PAK3 polyclonal antibody

Catalog # PAB2300 Size 400 uL

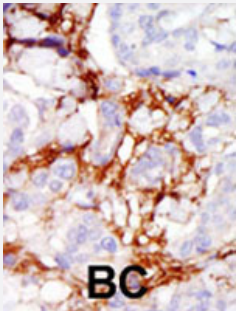
Applications



Western Blot (Transfected lysate)

Western blot analysis of PAK3 (arrow) using PAK3 polyclonal antibody (Cat # PAB2300).

293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PAK3 gene (Lane 2).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the PAK3 polyclonal antibody (Cat # PAB2300), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PAK3.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to internal region of human PAK3.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage 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

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Gene Info — PAK3

Entrez GeneID	5063
Protein Accession#	O75914
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

- [The autophagy protein ATG9A promotes HIV-1 infectivity.](#)

Mailler E, Waheed AA, Park SY, Gershlick DC, Freed EO, Bonifacino JS.
Retrovirology 2019 Jul; 16(1):18.

Application: WB-Tr, Human, HeLa cells

- [Gene diversity patterns at 10 X-chromosomal loci in humans and chimpanzees.](#)

Kitano T, Schwarz C, Nickel B, Paabo S.
Molecular Biology and Evolution 2003 Aug; 20(8):1281.

- [PAK3 mutation in nonsyndromic X-linked mental retardation.](#)

Allen KM, Gleeson JG, Bagrodia S, Partington MW, MacMillan JC, Cerione RA, Mulley JC, Walsh CA.
Nature Genetics 1998 Sep; 20(1):25.

Application: IF, WB-Tr, Mouse, Monkey, COS cells, Cerebral cortex

Pathway

- [Axon guidance](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)

- [T cell receptor signaling pathway](#)

Disease

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