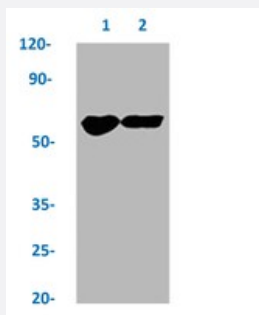


RecomAb™

PAK1/PAK2/PAK3 (phospho S144/S141/S139) recombinant monoclonal antibody, clone 3H12

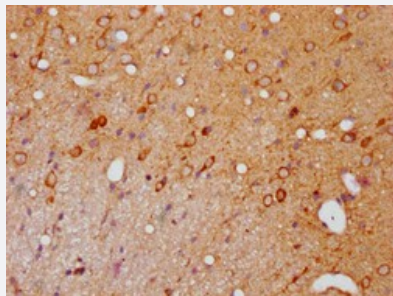
Catalog # RAB04240 Size 100 uL

Applications



Western Blot

Western blot analysis of Lane 1: A549 whole cell lysate (treated with EGF 100 ng/mL/20 mins) and Lane 2: A549 whole cell lysate (not treated) with PAK1/PAK2/PAK3 (phospho S144/S141/S139) recombinant monoclonal antibody, clone 3H12 (Cat # RAB04240).



Immunohistochemistry

Immunohistochemical staining of rat brain tissue with PAK1/PAK2/PAK3 (phospho S144/S141/S139) recombinant monoclonal antibody, clone 3H12 (Cat # RAB04240) (diluted at 1:100).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PAK3/PAK1/PAK2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surrounding S144/S141/S139 of human PAK1/PAK2/PAK3.
Theoretical MW (kDa)	Calculated MW: 65 kD
Reactivity	Human

Form	Liquid
Purification	Affinity chromatography
Isotype	IgG
Recommend Usage	ELISA Immunohistochemistry (1:50-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °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

Western blot analysis of Lane 1: A549 whole cell lysate (treated with EGF 100 ng/mL/20 mins) and Lane 2: A549 whole cell lysate (not treated) with PAK1/PAK2/PAK3 (phospho S144/S141/S139) recombinant monoclonal antibody, clone 3H12 (Cat # RAB04240).

- Immunohistochemistry

Immunohistochemical staining of rat brain tissue with PAK1/PAK2/PAK3 (phospho S144/S141/S139) recombinant monoclonal antibody, clone 3H12 (Cat # RAB04240) (diluted at 1:100).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PAK1

Entrez GeneID	5058
Protein Accession#	O75914;Q13153;Q13177
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](#)

Protein Accession#

[O75914;Q13153;Q13177](#)

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](#)

Protein Accession#

[O75914;Q13153;Q13177](#)

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	<p>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]</p>
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

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](#)