

RecomAb™

PAK4/5/6 (phospho S474/S560/S602) recombinant monoclonal antibody, clone R08-2F3

Catalog # RAB04403 Size 100 uL

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PAK4/5/6.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surrounding S474/S560/S602 of human PAK4/5/6.
Theoretical MW (kDa)	Calculated MW: 64,80
Reactivity	Human, Mouse, Rat
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)
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

- Western Blot

Gene Info — PAK4

Entrez GeneID [10298](#)**Protein Accession#** [O96013;Q9P286;Q9NQU5](#)**Gene Name** PAK4**Gene Alias** -**Gene Description** p21 protein (Cdc42/Rac)-activated kinase 4**Omim ID** [605451](#)**Gene Ontology** [Hyperlink](#)

Gene Summary

PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 interacts specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family of MAP kinases. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq]

Other Designations p21(CDKN1A)-activated kinase 4|p21-activated kinase 4|protein kinase related to S. cerevisiae STE20, effector for Cdc42Hs

Gene Info — PAK6

Entrez GeneID [56924](#)**Protein Accession#** [O96013;Q9P286;Q9NQU5](#)**Gene Name** PAK6**Gene Alias** PAK5**Gene Description** p21 protein (Cdc42/Rac)-activated kinase 6**Omim ID** [608110](#)**Gene Ontology** [Hyperlink](#)

Gene Summary

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]

Other Designations

p21(CDKN1A)-activated kinase 6|p21-activated kinase 6|p21-activated protein kinase 6

Gene Info — PAK7

Entrez GeneID

[57144](#)

Protein Accession#

[O96013;Q9P286;Q9NQU5](#)

Gene Name

PAK7

Gene Alias

KIAA1264, MGC26232, PAK5

Gene Description

p21 protein (Cdc42/Rac)-activated kinase 7

Omim ID

[608038](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the PAK family of Ser/Thr protein kinases. PAK family members are known to be effectors of Rac/Cdc42 GTPases, which have been implicated in the regulation of cytoskeletal dynamics, proliferation, and cell survival signaling. This kinase contains a CDC42/Rac1 interactive binding (CRIB) motif, and has been shown to bind CDC42 in the presence of GTP. This kinase is predominantly expressed in brain. It is capable of promoting neurite outgrowth, and thus may play a role in neurite development. This kinase is associated with microtubule networks and induces microtubule stabilization. The subcellular localization of this kinase is tightly regulated during cell cycle progression. Alternatively spliced transcript variants encoding the same protein have been described. [provided by RefSeq]

Other Designations

OTTHUMP00000030258|OTTHUMP00000030259|OTTHUMP00000030260|p21(CDKN1A)-activated kinase 7|p21-activated kinase 7|protein kinase PAK5|serine/threonine-protein kinase PAK 7

Pathway

- [Axon guidance](#)

- [Axon guidance](#)
- [Axon guidance](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [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

- [Adenocarcinoma](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Kidney Failure](#)

- [Lung Neoplasms](#)
- [Parkinson disease](#)
- [Parkinson disease](#)
- [Pulmonary Disease](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)