

PAK1/PAK2/PAK3 (phospho T423) polyclonal antibody

Catalog # PAB10329

Size 100 ug

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of PAK1/PAK2/PAK3.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding T423 of human PAK1/PAK2/PAK3.
Host	Rabbit
Reactivity	Human
Specificity	This phospho specific polyclonal antibody is specific to phosphorylated pT423 of human PAK 1/2/3. Reactivity with non-phosphorylated PAK 1/2/3 is less than 1% by ELISA.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	Sandwich ELISA (1:5000-1:25000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% 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

- Western Blot
- 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

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](#)