PAK1 polyclonal antibody

Catalog # PAB2110 Size 400 uL

Applications



Western Blot (Transfected lysate)

Western blot analysis of PAK1 (arrow) using PAK1 polyclonal antibody (Cat # PAB2110). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PAK1 gene (Lane 2) (Origene Technologies).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with PAK1 polyclonal antibody (Cat # PAB2110), which was peroxidaseconjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry ; clinical relevance has not been evaluated.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PAK1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to residues surrounding T423 of human PA K1.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein A purification



Product Information

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) 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 shoul d be handled by trained staff only.

Applications

Western Blot (Transfected lysate)

Western blot analysis of PAK1 (arrow) using PAK1 polyclonal antibody (Cat # PAB2110). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PAK1 gene (Lane 2) (Origene Technologies).

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

Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with PAK1 polyclonal antibody (Cat # PAB2110) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Entrez GenelD	<u>5058</u>
Protein Accession#	<u>NP_002567;Q13153</u>
Gene Name	PAK1
Gene Alias	MGC130000, MGC130001, PAKalpha
Gene Description	p21 protein (Cdc42/Rac)-activated kinase 1
Omim ID	<u>602590</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	PAK proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nucle ar signaling. PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PA K2, 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 m otility and morphology. Alternativelt spliced transcript variants encoding different isoforms have be en found for this gene. [provided by RefSeq

Gene Info — PAK1



Product Information

Other Designations

STE20 homolog, yeast|p21-activated kinase 1|p21/Cdc42/Rac1-activated kinase 1 (STE20 hom olog, yeast)|p21/Cdc42/Rac1-activated kinase 1 (yeast Ste20-related)

Publication Reference

<u>The C-terminal kinase domain of the p34cdc2-related PITSLRE protein kinase (p110C) associates with p21-activated kinase 1 and inhibits its activity during anoikis.</u>

Chen S, Yin X, Zhu X, Yan J, Ji S, Chen C, Cai M, Zhang S, Zong H, Hu Y, Yuan Z, Shen Z, Gu J. The Journal of Biological Chemistry 2003 May; 278(22):20029.

Application: IP, KA, WB-Tr, Mouse, NIH/3T3 cells

Human p21-activated kinase (Pak1) regulates actin organization in mammalian cells.

Sells MA, Knaus UG, Bagrodia S, Ambrose DM, Bokoch GM, Chernoff J. Current Biology 1997 Mar; 7(3):202.

Human Ste20 homologue hPAK1 links GTPases to the JNK MAP kinase pathway.

Brown JL, Stowers L, Baer M, Trejo J, Coughlin S, Chant J. Current Biology 1996 May; 6(5):598.

Application: WB-Tr, Monkey, COS-7 cells

Pathway

- Axon guidance
- <u>Chemokine signaling pathway</u>
- Epithelial cell signaling in Helicobacter pylori infection
- ErbB signaling pathway
- Fc gamma R-mediated phagocytosis
- Focal adhesion
- <u>MAPK signaling pathway</u>
- Natural killer cell mediated cytotoxicity
- <u>Regulation of actin cytoskeleton</u>
- Renal cell carcinoma



• <u>T cell receptor signaling pathway</u>

Disease

- <u>Carcinoma</u>
- Esophageal Neoplasms
- HIV Infections
- Tobacco Use Disorder