PAK4 (phospho S474) polyclonal antibody

Catalog # PAB12642 Size 100 ug

Applications



Western Blot (Cell lysate)

The cell lysate derived from HEK 293 cells was immunoprobed by PAK4 (phospho S474) polyclonal antibody (Cat # PAB12642) at 1 : 500. An immunoreactive band is observed around ~ 68kDa (Lane 1). This band is blocked by pre-incubation with immunizing peptide (Lane 2).

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of PAK4.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding S474 of human PAK4.
Sequence	RKSLV
Host	Rabbit
Theoretical MW (kDa)	68, 90, 80
Reactivity	Human, Mouse, Rat
Specificity	This antibody recognizes the phosphorylated peptide only. It recognizes PAK4 protein at a phosphor ylation site of Serine 474(~68 kDa), or serine 602 of PAK5 (~90 kDa) or Serine 560 of PAK6 (~80 k Da). It does not cross react to other PAK1, PAK2 or PAK3.
Form	Liquid
Purification	Phosphospecific-epitope affinity purification



Product Information

Recommend Usage	ELISA (0.01-0.1 ug/mL) Immunoprecipitation (2-5 ug/mL) Western Blot (0.1-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (antibody stabilizer).
Storage Instruction	Store at 2-8°C for three month without detectable loss of activity. For long term storage, store at -20° C to -80°C. Aliquot to avoid repeated freezing and thawing.

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- Immunoprecipitation
- Enzyme-linked Immunoabsorbent Assay

Gene Info — PAK4	
Entrez GenelD	<u>10298</u>
Gene Name	PAK4
Gene Alias	-
Gene Description	p21 protein (Cdc42/Rac)-activated kinase 4
Omim ID	<u>605451</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 an d 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 a nd have been implicated in a wide range of biological activities. PAK4 interacts specifically with t he 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 thi s gene. [provided by RefSeq



Product Information

Other Designations

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

Publication Reference

Requirement for PAK4 in the anchorage-independent growth of human cancer cell lines.

Callow MG, Clairvoyant F, Zhu S, Schryver B, Whyte DB, Bischoff JR, Jallal B, Smeal T.

J Biol Chem 2001 Oct; 277(1):550.

Application: IF, WB, Mouse, NIH/3T3 cells

Pathway

- Axon guidance
- ErbB signaling pathway
- Focal adhesion
- <u>Regulation of actin cytoskeleton</u>
- Renal cell carcinoma
- <u>T cell receptor signaling pathway</u>

Disease

- Genetic Predisposition to Disease
- Parkinson disease