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PAK5 Antibody Blocking Peptide

Synthetic peptide

Catalog # BP7930a

Specification

PAK5 Antibody Blocking Peptide - Product Information

Primary Accession O9P286

PAK5 Antibody Blocking Peptide - Additional Information

Gene ID 57144

Other Names
Serine/threonine-protein kinase PAK 7, p21-activated kinase 5, PAK-5, p21-activated kinase 7, PAK-7, PAK7, KIAA1264, PAK5

Target/Specificity
The synthetic peptide sequence is selected from aa 183~198 of human PAK5.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PAK5 Antibody Blocking Peptide - Protein Information

Name PAK5 (HGNC:15916)

Synonyms KIAA1264, PAK7

Function
Serine/threonine protein kinase that plays a role in a variety of different signaling

PAK5 Antibody Blocking Peptide - Background

PAK5 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.

PAK5 Antibody Blocking Peptide - References

Jaffer, Z.M., et al., Int. J. Biochem. Cell Biol. 34(7):713-717 (2002).Pandey, A., et al., Oncogene 21(24):3939-3948 (2002).Dan, C., et al., Mol. Cell. Biol. 22(2):567-577 (2002).Cau, J., et al., J. Cell Biol. 155(6):1029-1042 (2001).

pathways including cytoskeleton regulation, cell migration, proliferation or cell survival. Activation by various effectors including growth factor receptors or active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates the proto-oncogene RAF1 and stimulates its kinase activity. Promotes cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Phosphorylates CTNND1, probably to regulate cytoskeletal organization and cell morphology. Keeps microtubules stable through MARK2 inhibition and destabilizes the F-actin network leading to the disappearance of stress fibers and focal adhesions.

Cellular Location
Mitochondrion. Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the mitochondria, and mitochondrial localization is essential for the role in cell survival

Tissue Location
Predominantly expressed in brain.

PAK5 Antibody Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides