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PAK4 Blocking Peptide
Catalog # PBV10186b

Specification

PAK4 Blocking Peptide - Product Information

Primary Accession	O96013
Other Accession	BAF84528
Gene ID	10298
Calculated MW	64072

PAK4 Blocking Peptide - Additional Information

Gene ID 10298

Application & Usage	**The peptide is used for blocking the antibody activity of Pak4. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.**

Other Names
Serine/threonine-protein kinase PAK 4, 2.7.11.1, p21-activated kinase 4, PAK-4, PAK4, KIAA1142

Target/Specificity
PAK4

Formulation
50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
PAK4 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

PAK4 Blocking Peptide - Protein Information

Name PAK4

Synonyms KIAA1142

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

including cytoskeleton regulation, cell migration, growth, 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 and inactivates the protein phosphatase SSH1, leading to increased inhibitory phosphorylation of the actin binding/depolymerizing factor cofilin. Decreased cofilin activity may lead to stabilization of actin filaments. Phosphorylates LIMK1, a kinase that also inhibits the activity of cofilin. Phosphorylates integrin beta5/ITGB5 and thus regulates cell motility. Phosphorylates ARHGEF2 and activates the downstream target RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers. Stimulates cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Alternatively, inhibits apoptosis by preventing caspase-8 binding to death domain receptors in a kinase independent manner. Plays a role in cell-cycle progression by controlling levels of the cell- cycle regulatory protein CDKN1A and by phosphorylating RAN.

Cellular Location
Cytoplasm. Note=Seems to shuttle between cytoplasmic compartments depending on the activating effector. For example, can be found on the cell periphery after activation of growth-factor or integrin-mediated signaling pathways.

Tissue Location
Highest expression in prostate, testis and colon.

PAK4 Blocking Peptide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PAK4 Blocking Peptide - Images