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PAK4 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11429

Specification

PAK4 Antibody (Internal) - Product Information

Application	**WB, IHC-P, IF**
Primary Accession	O96013
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**64kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IF~~1:50~200**

PAK4 Antibody (Internal) - Additional Information

Gene ID 10298

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

Target/Specificity
13 amino acid peptide from near the center of human PAK4

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
PAK4 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

PAK4 Antibody (Internal) - Protein Information

Name PAK4 (HGNC:16059)

Synonyms KIAA1142

Function
Serine/threonine-protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell adhesion turnover, cell migration, growth, proliferation or cell survival (PubMed:26598620). 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. Promotes kinase-independent stabilization of RHOU, thereby contributing to focal adhesion disassembly during cell migration (PubMed:26598620).

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.

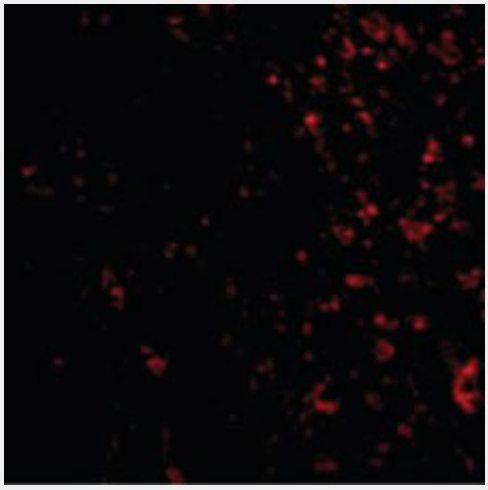
Tissue Location
Highest expression in prostate, testis and colon.

PAK4 Antibody (Internal) - 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 Antibody (Internal) - Images



Immunofluorescence of PAK4 in Human Colon cells with PAK4 antibody at 20 ug/ml.

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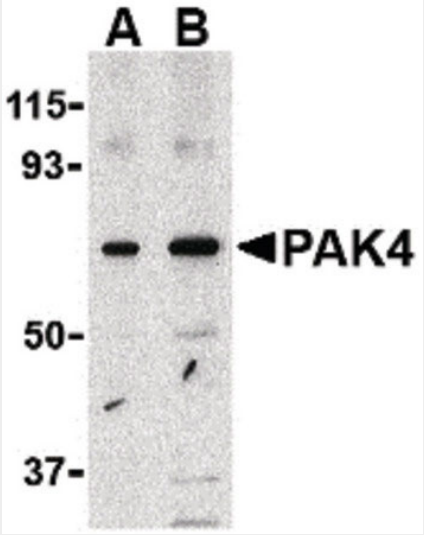
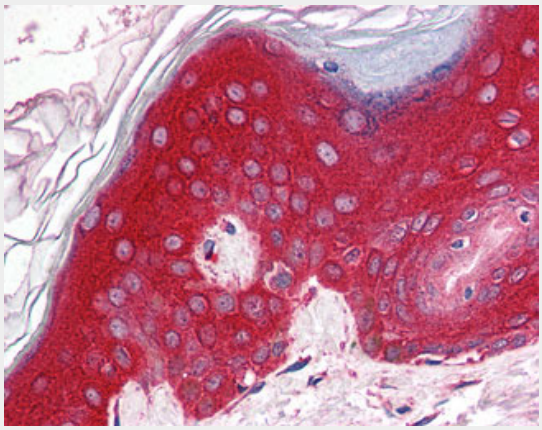
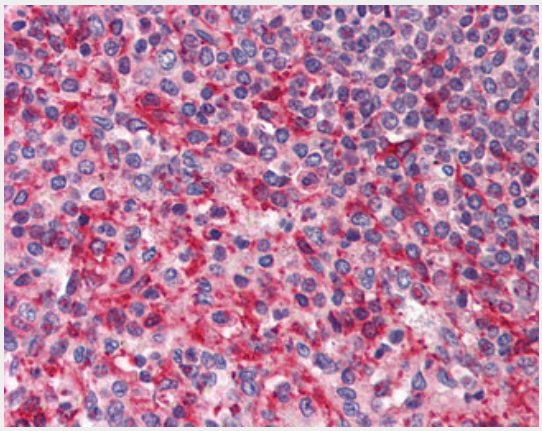


Western blot of PAK4 in SW480 lysate with PAK4 antibody at (A) 1 and (B) 2 ug/ml.



Anti-PAK4 antibody IHC of human skin.



Anti-PAK4 antibody IHC of human spleen.

PAK4 Antibody (Internal) - Background

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

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PAK4 Antibody (Internal) - References

Abo A.,et al.EMBO J. 17:6527-6540(1998).
Melnick M.B.,et al.Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
Hirosawa M.,et al.DNA Res. 6:329-336(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).