

**PAK4 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS11429****Specification**

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**PAK4 Antibody (Internal) - Product Information**

Application	IF, WB, IHC
Primary Accession	<a href="#">O96013</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64kDa KDa

**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**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.

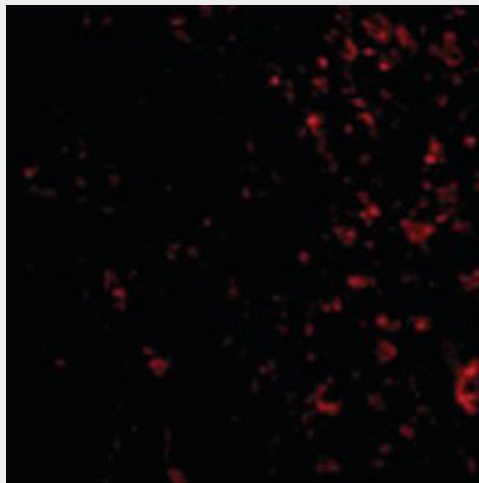
**Tissue Location**

Highest expression in prostate, testis and colon.

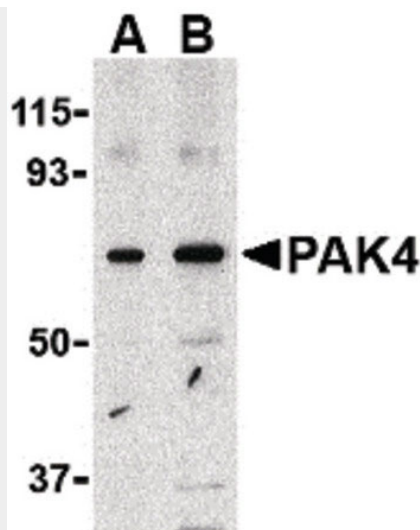
**PAK4 Antibody (Internal) - Protocols**

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

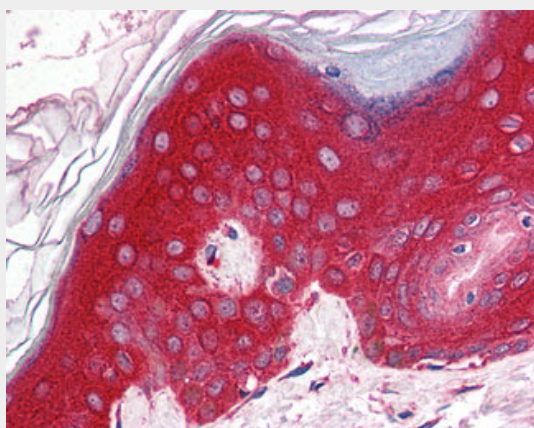
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PAK4 Antibody (Internal) - Images**

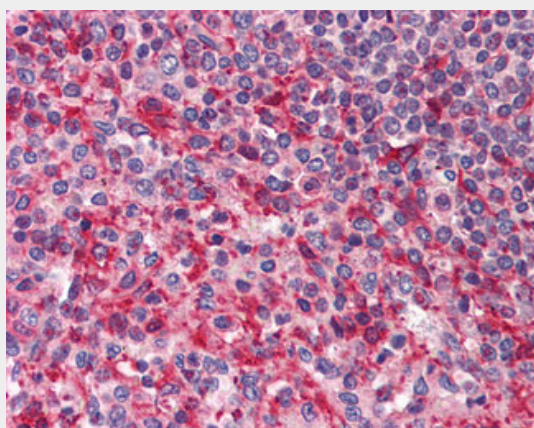
Immunofluorescence of PAK4 in Human Colon cells with PAK4 antibody at 20 ug/ml.



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

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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).