

Anti-PAK4 (pS474) Antibody
Catalog # AP53726

Specification

Anti-PAK4 (pS474) Antibody - Product Information

Application	WB, IF
Primary Accession	O96013
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64072

Anti-PAK4 (pS474) Antibody - Additional Information

Gene ID 10298

Other Names

KIAA1142; Serine/threonine-protein kinase PAK 4; p21-activated kinase 4; PAK-4

Target/Specificity

Recognizes endogenous levels of PAK4 (pS474) protein.

Dilution

WB~~1/500 - 1/1000

IF~~1/50 - 1/200

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-PAK4 (pS474) Antibody - 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

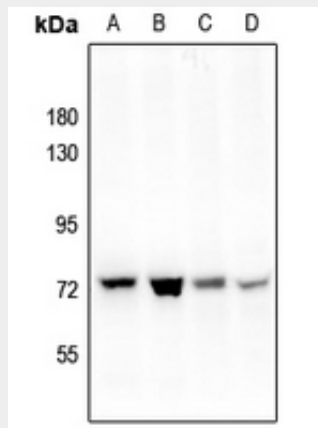
Highest expression in prostate, testis and colon.

Anti-PAK4 (pS474) Antibody - Protocols

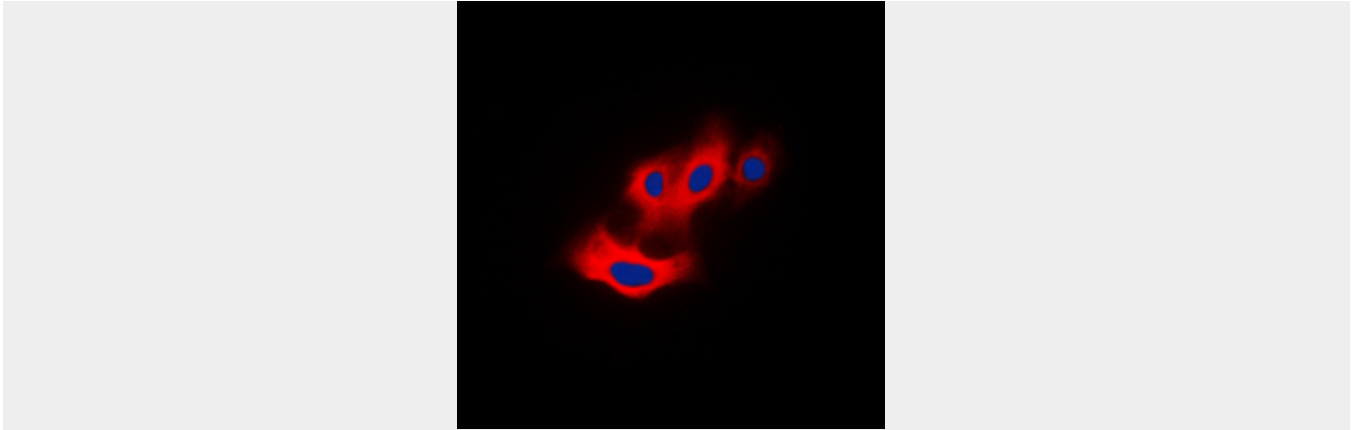
Provided below are standard protocols that you may find useful for product applications.

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

Anti-PAK4 (pS474) Antibody - Images



Western blot analysis of PAK4 (pS474) expression in PC3 (A), MCF7 (B), NIH3T3 (C), PC12 (D) whole cell lysates.



Immunofluorescent analysis of PAK4 (pS474) staining in Raw264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Anti-PAK4 (pS474) Antibody - Background

Rabbit polyclonal antibody to PAK4 (pS474)