

Anti-PAK5 Picoband Antibody

Catalog # ABO12419

#### Specification

# Anti-PAK5 Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary Accession09P286HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for Serine/threonine-protein kinase PAK 7(PAK7) dete

Rabbit IgG polyclonal antibody for Serine/threonine-protein kinase PAK 7(PAK7) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-PAK5 Picoband Antibody - Additional Information

Gene ID 57144

**Other Names** Serine/threonine-protein kinase PAK 5, 2.7.11.1, p21-activated kinase 5, PAK-5, p21-activated kinase 7, PAK-7, PAK5 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=15916" target="\_blank">HGNC:15916</a>), KIAA1264, PAK7

Calculated MW 80745 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat<br><br><br>Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization

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

**Tissue Specificity** Predominantly expressed in brain.

**Protein Name** Serine/threonine-protein kinase PAK 7

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the N-terminus of human PAK5 (26-55aa DPQEQKFTGLPQQWHSLLADTANRPKPMVD), identical to the related mouse and rat sequences.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

## Anti-PAK5 Picoband Antibody - Protein Information

Name PAK5 (<u>HGNC:15916</u>)

Synonyms KIAA1264, PAK7

Function

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

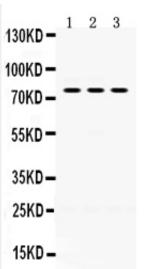
## **Anti-PAK5 Picoband Antibody - Protocols**

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

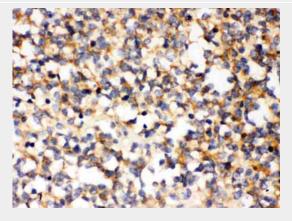
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PAK5 Picoband Antibody - Images





Anti- PAK5 Picoband antibody, ABO12419, Western blottingAll lanes: Anti PAK5 (ABO12419) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugPredicted bind size: 81KDObserved bind size: 81KD



Anti- PAK5 Picoband antibody, ABO12419, IHC(P)IHC(P): Human Glioma Tissue

# Anti-PAK5 Picoband Antibody - Background

Serine/threonine-protein kinase PAK 7, also known as PAK5, is an enzyme that in humans is encoded by the PAK7 gene. The protein encoded by this gene 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. And this kinase is predominantly expressed in brain. It is capable of promoting neurite outgrowth, and thus may play a role in neurite development. In addition, this kinase is associated with microtubule networks and induces microtubule stabilization. The subcellular localization of this kinase is tightly regulated during cell cycle progression. Alternatively spliced transcript variants encoding the same protein have been described.