SunLong Biotech Co.,LTD
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# Rabbit Anti-PAK5 antibody

SL0655R

| | |
|---|---|
| **Product Name** | PAK5 |
| **Chinese Name** | 激活激酶 PAK7 抗体 |
| **Alias** | Mbt; mushroom bodies tiny; Pak2;p21 activated kinase 7; p21 protein (Cdc42/Rac)-activated kinase 7; p21(CDKN1A) activated kinase 7; p21-activated kinase 5; p21-activated kinase 7; PAK 5; PAK7; PAK 7; PAK-5; PAK-7; PAK5; PAK7; Protein kinase PAK5; Serine/threonine protein kinase PAK 7; MBT; Serine/threonine-protein kinase PAK 7; PAK7_HUMAN; Protein kinase PAK5. |
| **Research Area** | Tumour Neurobiology Signal transduction Kinases and Phosphatases |
| **Immunogen Species** | Rabbit |
| **Clonality** | Polyclonal |
| **React Species** | Mouse, Rat, (predicted: Human, ) |
| **Applications** | IHC-P=1:400-800,IHC-F=1:400-800,IF=1:100-500,ELISA=1:5000-10000 （Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Theoretical molecular weight** | 81kDa |
| **Cellular localization** | The nucleus cytoplasmic |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **immunogen** | KLH conjugated synthetic peptide derived from human PAK7: 621-719/719 |
| **Lsotype** | IgG |
| **Purification** | affinity purified by Protein A |
| **Buffer Solution** | 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. |
| **Storage** | Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. |
| **Attention** | This product as supplied is intended for research use only, not for use in human, |

therapeutic or diagnostic applications.

**PubMed** PubMed

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. This kinase is predominantly expressed in brain. It is capable of promoting neurite outgrowth, and thus may play a role in neurite development. 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. [provided by RefSeq, Jul 2008]

**Product Detail**

**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.

**Subunit:**
Interacts tightly with GTP-bound but not GDP-bound CDC42/p21 and RAC1. Interacts with MARK2, leading to inhibit MARK2 independently of kinase activity. Interacts with RHOD and RHOH.

**Subcellular Location:**
Mitochondrion. Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the mitochondria, and mitochondrial localization is essential for the role in cell survival.

**Tissue Specificity:**
Predominantly expressed in brain.

**Post-translational modifications:**
Autophosphorylated when activated by CDC42/p21.

**Similarity:**
Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20

subfamily.
Contains 1 CRIB domain.
Contains 1 protein kinase domain.

**SWISS:**
P24158

**Gene ID:**
57144

**Database links:**

Entrez Gene: 57144 Human

Entrez Gene: 241656 Mouse

Omim: 608038 Human

SwissProt: Q9P286 Human

SwissProt: Q8C015 Mouse

SwissProt: D4A280 Rat

Unigene: 32539 Human

Unigene: 131572 Mouse

PAK7 通过影响 NFκB 信号通路而抑制 Apoptosis、影响 Cytoskeleton 形成、促进细胞的生长、发育，是 NFκB 信号通路的重要调控蛋白.

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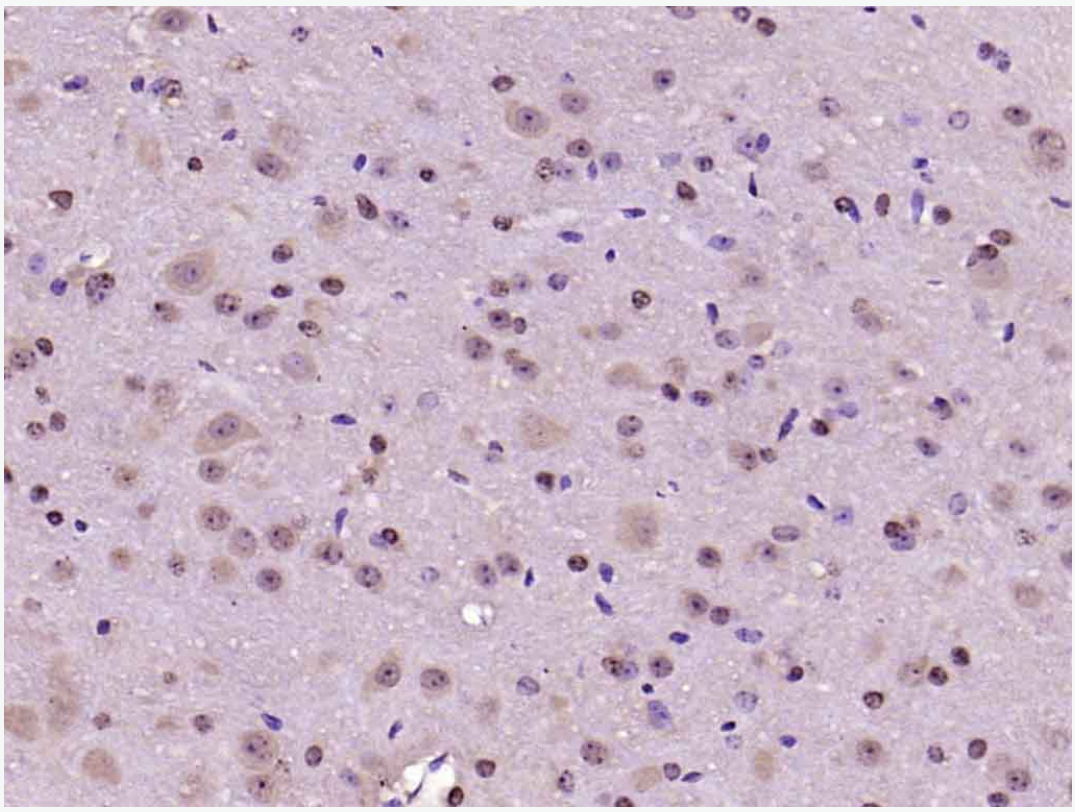
**Product Picture**



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAK5) Polyclonal Antibody, Unconjugated (SL0655R ) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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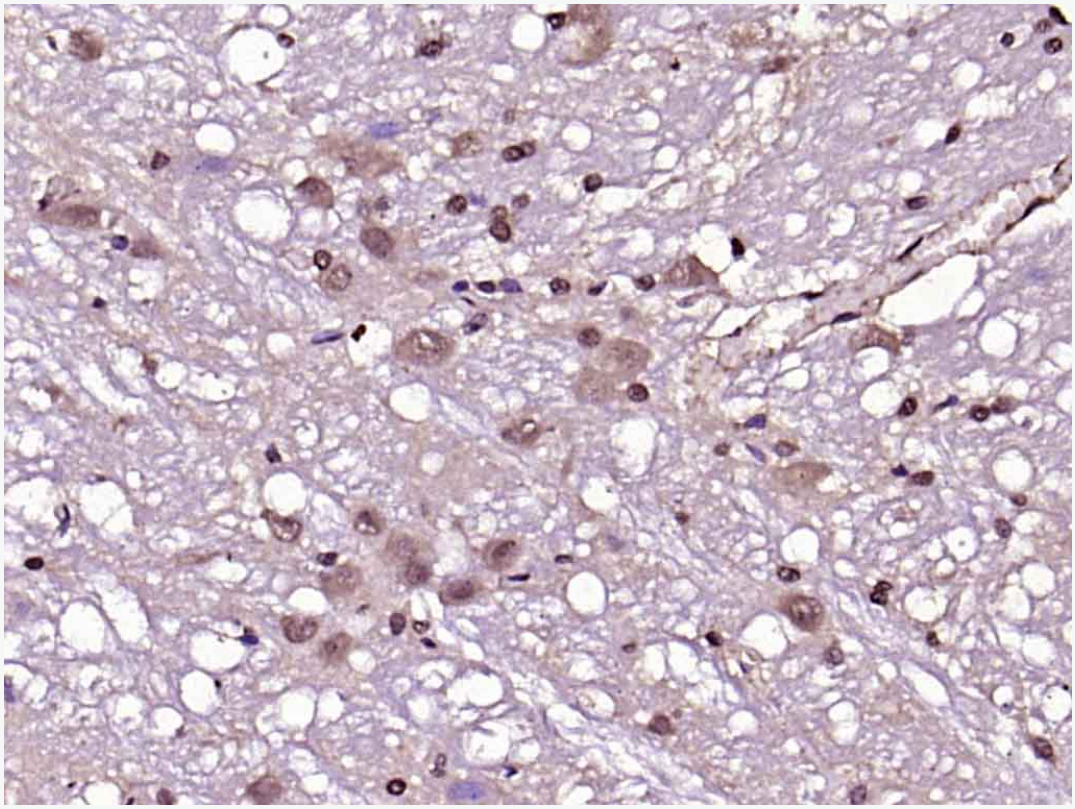

Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAK5) Polyclonal Antibody, Unconjugated (SL0655R ) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.