



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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	81kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PAK7:621-719/719
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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]

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

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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.