

ARG66839 anti-PAK5 phospho (Ser602) + PAK6 phospho (Ser560) antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PAK5 phospho (Ser602) + PAK6 phospho (Ser560)
Tested Reactivity	Hu
Predict Reactivity	Ms
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PAK5 + PAK6
Species	Human
Immunogen	Phosphospecific peptide around Ser602 (aa. 566-615) of Human PAK5.
Conjugation	Un-conjugated
Alternate Names	PAK5: EC 2.7.11.1; Serine/threonine-protein kinase PAK 7; p21-activated kinase 7; p21-activated kinase 5; PAK-7; PAK-5 PAK6: Serine/threonine-protein kinase PAK 6; EC 2.7.11.1; p21-activated kinase 6; PAK5; PAK-6; PAK-5

Application Instructions

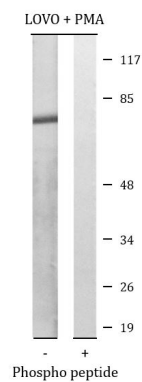
Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	LOVO + PMA	
Observed Size	~ 80 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	PAK7 (PAK5); PAK6
Gene Full Name	p21 protein (Cdc42/Rac)-activated kinase 7 p21 protein (Cdc42/Rac)-activated kinase 6
Background	<p>PAK5: 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]</p> <p>PAK6: This gene encodes a member of a family of p21-stimulated serine/threonine protein kinases, which contain an amino-terminal Cdc42/Rac interactive binding (CRIB) domain and a carboxyl-terminal kinase domain. These kinases function in a number of cellular processes, including cytoskeleton rearrangement, apoptosis, and the mitogen-activated protein (MAP) kinase signaling pathway. The protein encoded by this gene interacts with androgen receptor (AR) and translocates to the nucleus, where it is involved in transcriptional regulation. Changes in expression of this gene have been linked to prostate cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2013]</p>
Function	<p>PAK5: 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. [UniProt]</p> <p>PAK6: Serine/threonine protein kinase that plays a role in the regulation of gene transcription. The kinase activity is induced by various effectors including AR or MAP2K6/MAPKK6. Phosphorylates the DNA-binding domain of androgen receptor/AR and thereby inhibits AR-mediated transcription. Inhibits also ESR1-mediated transcription. May play a role in cytoskeleton regulation by interacting with IQGAP1. May protect cells from apoptosis through phosphorylation of BAD. [UniProt]</p>
Calculated Mw	81 kDa
PTM	<p>PAK5: Autophosphorylated when activated by CDC42/p21. [UniProt]</p> <p>PAK6: Autophosphorylated. Phosphorylated by MAP2K6//MAPKK6, leading to PAK6 activation. [UniProt]</p>
Cellular Localization	PAK5: Mitochondrion. Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the mitochondria, and mitochondrial localization is essential for the role in cell survival. [UniProt]



ARG66839 anti-PAK5 phospho (Ser602) + PAK6 phospho (Ser560) antibody WB image

Western blot: LOVO cells treated with PMA (125 ng/ml, 30 min). Cell lysates were stained with ARG66839 anti-PAK5 phospho (Ser602) + PAK6 phospho (Ser560) antibody. The lane on the right is blocked with the phospho peptide.