



PAKy Monoclonal Antibody

Catalog No	YP-Ab-14181
Isotype	IgG
Reactivity	Human;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	PAK2
Immunogen	Purified recombinant fragment of PAKy expressed in E. Coli.
Specificity	PAKy Monoclonal Antibody detects endogenous levels of PAKy protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	C t PAK2;EC:2.7.11.1;Gamma PAK;Gamma-PAK;p21 activated kinase 2;PAK2; Serine/threonine-protein kinase PAK 2;PAK65;S6/H4 kinase;p21-activated kinase 2;PAK-2;p58
Observed Band	
Calculated Molecular Weight	
Cell Pathway	[Serine/threonine-protein kinase PAK 2]: Cytoplasm. MYO18A mediates the cellular distribution of the PAK2-ARHGEF7-GIT1 complex to the inner surface of the cell membrane.; [PAK-2p34]: Nucleus. Cytoplasm, perinuclear region. Membrane; Lipid-anchor. Interaction with ARHGAP10 probably changes PAK-2p34 location to cytoplasmic perinuclear region. Myristoylation changes PAK-2p34 location to the membrane.
Tissue Specificity	Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein..enzyme regulation:Activated by binding small G proteins. Binding of GTP-bound CDC42 or RAC1 to the autoregulatory region releases monomers from the autoinhibited dimer, enables phosphorylation of Thr-402 and allows the kinase domain to



adopt an active structure (By similarity). Following caspase cleavage, autophosphorylated PAK-2p34 is constitutively active.,function:The activated kinase acts on a variety of targets. Phosphorylates ribosomal protein S6, histone H4 and myelin basic protein. Full length PAK 2 stimulates cell survival and cell growth. The process is, at least in part, mediated by phosphorylation and inhibition of pro-apoptotic BAD. Caspase-activated PAK-2p34 is involved in cell death response, probably involving the JNK signaling pathway. Cleaved PAK-2p34 seems to have a higher activity than the CDC42-activated for

Background

The p21 activated kinases (PAK) are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. The PAK proteins are a family of serine/threonine kinases that serve as targets for the small GTP binding proteins, CDC42 and RAC1, and have been implicated in a wide range of biological activities. The protein encoded by this gene is activated by proteolytic cleavage during caspase-mediated apoptosis, and may play a role in regulating the apoptotic events in the dying cell. [provided by RefSeq, Jul 2008],

matters needing attention

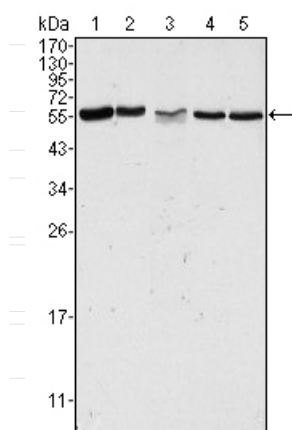
Avoid repeated freezing and thawing!

Usage suggestions

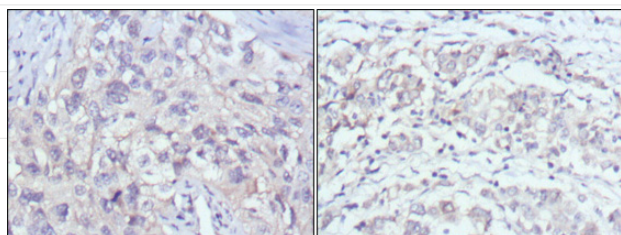
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



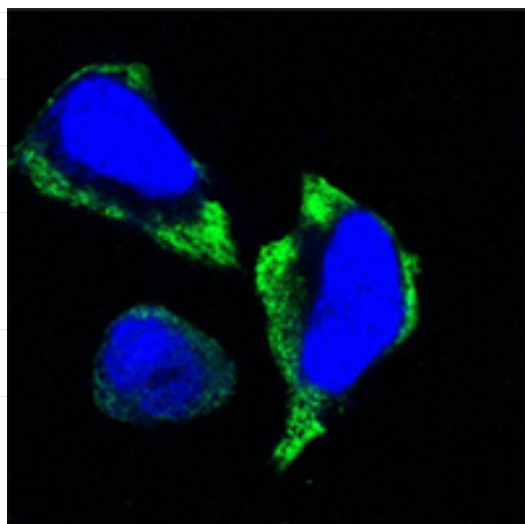
Products Images



Western Blot analysis using PAKy Monoclonal Antibody against HeLa (1), Jurkat (2), A549 (3), HEK293 (4) and K562 (5) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human lung cancer (left) and gastric cancer (right) with DAB staining using PAKy Monoclonal Antibody.



Confocal immunofluorescence analysis of HeLa cells using PAKy Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.