

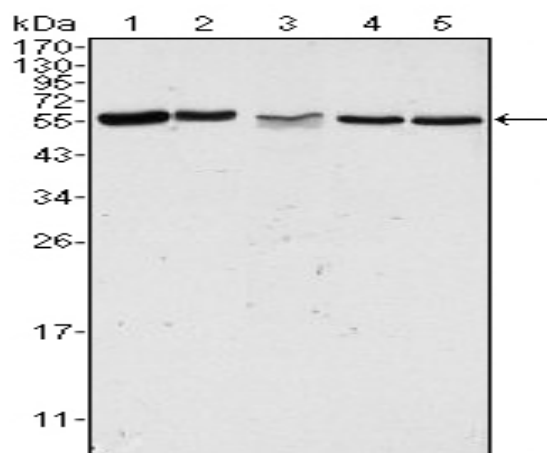
PAK $\gamma$  Monoclonal Antibody

<b>Catalog No :</b>	YM0502
<b>Reactivity :</b>	Human;Monkey
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	PAK2
<b>Fields :</b>	>>MAPK signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Axon guidance;>>Focal adhesion;>>T cell receptor signaling pathway;>>Regulation of actin cytoskeleton;>>Pathogenic Escherichia coli infection;>>Human immunodeficiency virus 1 infection;>>Renal cell carcinoma
<b>Gene Name :</b>	PAK2
<b>Protein Name :</b>	Serine/threonine-protein kinase PAK 2
<b>Human Gene Id :</b>	5062
<b>Human Swiss Prot No :</b>	Q13177
<b>Mouse Swiss Prot No :</b>	Q8CIN4
<b>Immunogen :</b>	Purified recombinant fragment of PAK $\gamma$ expressed in E. Coli.
<b>Specificity :</b>	PAK $\gamma$ Monoclonal Antibody detects endogenous levels of PAK $\gamma$ protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

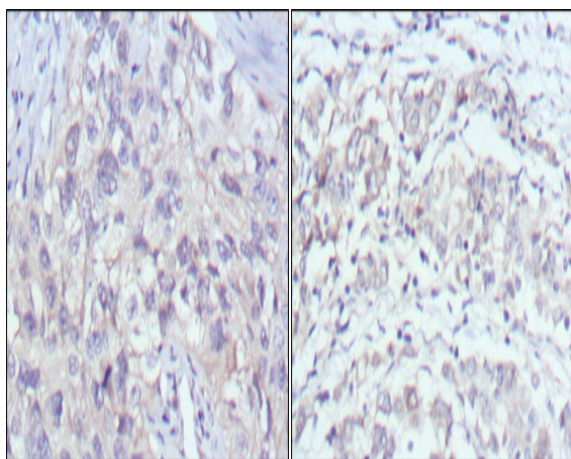
<b>Molecularweight :</b>	58kD
<b>Cell Pathway :</b>	MAPK_ERK_Growth;MAPK_G_Protein;ErbB_HER;Axon guidance;Focal adhesion;T_Cell_Receptor;Regulates Actin and Cytoskeleton;Renal cell carcinoma;
<b>P References :</b>	<ol style="list-style-type: none"> <li>1. J Immunol. 2004 Jun 15;172(12):7324-34.</li> <li>2. J Mol Biol. 2007 Jul 20;370(4):620-32.</li> </ol>
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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, autophosphorylted 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</p>
<b>Subcellular Location :</b>	<p>[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.</p>
<b>Expression :</b>	Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen.
<b>Sort :</b>	11600
<b>No4 :</b>	1
<b>Host :</b>	<p>Mouse</p> <p>Unmodified</p>

## **Modifications :**

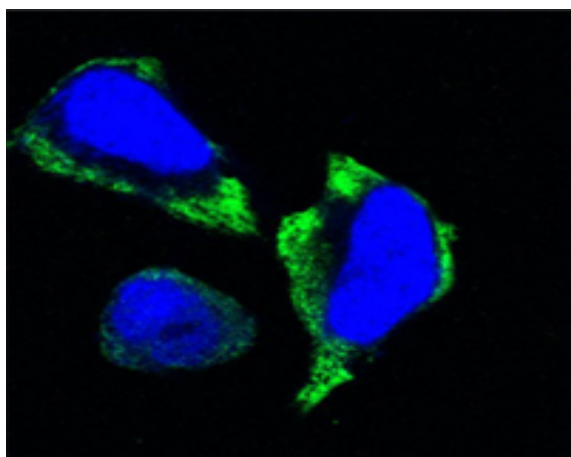
## Products Images



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.