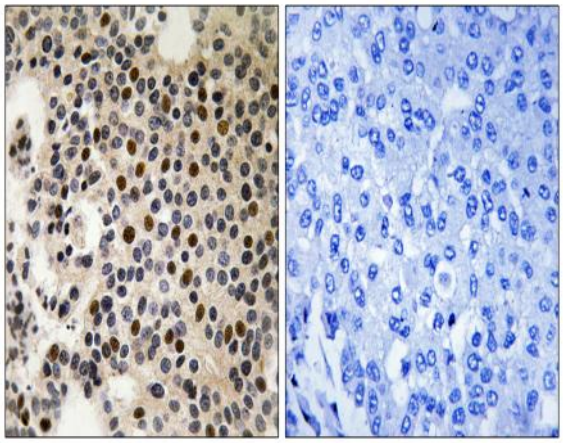
Best Tools for immunology Research

PAKγ (phospho Ser197) Polyclonal Antibody

Catalog No :	YP1054
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF;ELISA
Target :	PAK2
Fields :	>>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
Gene Name :	PAK2
Protein Name :	Serine/threonine-protein kinase PAK 2
Human Gene Id :	5062
Human Swiss Prot No :	Q13177
Mouse Gene Id :	224105
Mouse Swiss Prot No :	Q8CIN4
Rat Gene Id :	1.00911e+008
Rat Swiss Prot No :	Q64303
Immunogen :	The antiserum was produced against synthesized peptide derived from human PAK2 around the phosphorylation site of Ser197. AA range:163-212
Specificity :	Phospho-PAKγ (S197) Polyclonal Antibody detects endogenous levels of PAKγ protein only when phosphorylated at S197.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution :	IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	58kD
Cell Pathway :	MAPK_ERK_Growth;MAPK_G_Protein;ErbB_HER;Axon guidance;Focal adhesion;T_Cell_Receptor;Regulates Actin and Cytoskeleton;Renal cell carcinoma;
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],
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, 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
Subcellular Location :	[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.
Expression :	Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen.

Products Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PAK2 (Phospho-Ser197) Antibody. The picture on the right is blocked with the phospho peptide.