

PAKγ Polyclonal Antibody

Catalog No: YT3581

Reactivity: Human; Mouse; Rat

Applications: WB;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

Q13177

Q8CIN4

Human Gene Id: 5062

Human Swiss Prot

No:

Mouse Gene ld: 224105

Mouse Swiss Prot

No:

Rat Gene Id: 1.00911e+008

Rat Swiss Prot No: Q64303

Immunogen: The antiserum was produced against synthesized peptide derived from human

PAK2. AA range:5-54

Specificity: PAKγ Polyclonal Antibody detects endogenous levels of PAKγ protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/4



Dilution: WB 1:500 - 1:2000. 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)

Observed Band: 60kD

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

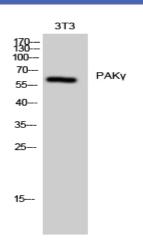
the cell membrane.; [PAK-2p34]: Nucleus. Cytoplasm, perinuclear region. Membrane; Lipid-anchor. Interaction with ARHGAP10 probably changes PAK-2p34 location to cytoplasmic perinuclear region. Myristoylation changes

PAK-2p34 location to the membrane.

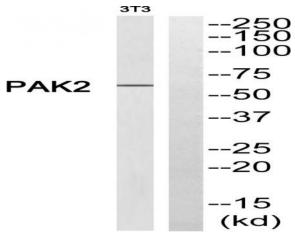
Expression: Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus

and spleen.

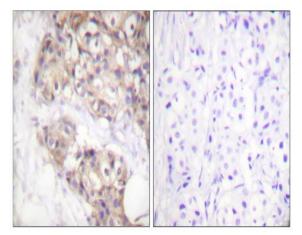
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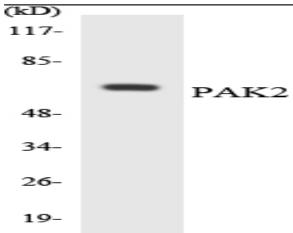
Western Blot analysis of 3T3 cells using PAK γ Polyclonal Antibody



Western blot analysis of PAK2 Antibody. The lane on the right is blocked with the PAK2 peptide.



Immunohistochemistryt analysis of paraffin-embedded human brain, using PAK2 Antibody. The lane on the right is blocked with the PAK2 peptide.



Western blot analysis of the lysates from COLO205 cells using PAK2 antibody.