



PAK γ (phospho Ser20) Polyclonal Antibody

Catalog No	YP-Ab-14463
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	PAK2
Immunogen	The antiserum was produced against synthesized peptide derived from human PAK2 around the phosphorylation site of Ser20. AA range:5-54
Specificity	Phospho-PAK γ (S20) Polyclonal Antibody detects endogenous levels of PAK γ protein only when phosphorylated at S20.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	p21-activated kinase 2;p21 activated kinase 2;Gamma-PAK;Gamma PAK; EC:2.7.11.1;PAK2;Serine/threonine-protein kinase PAK 2;PAK65;S6/H4 kinase; PAK-2;p58
Observed Band	62kD
Calculated Molecular Weight	62kD
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

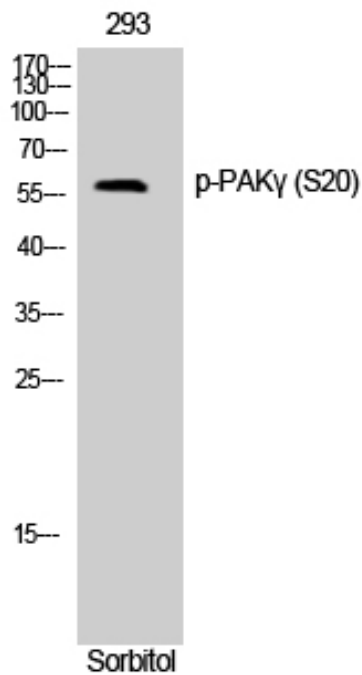
Avoid repeated freezing and thawing!

Usage suggestions

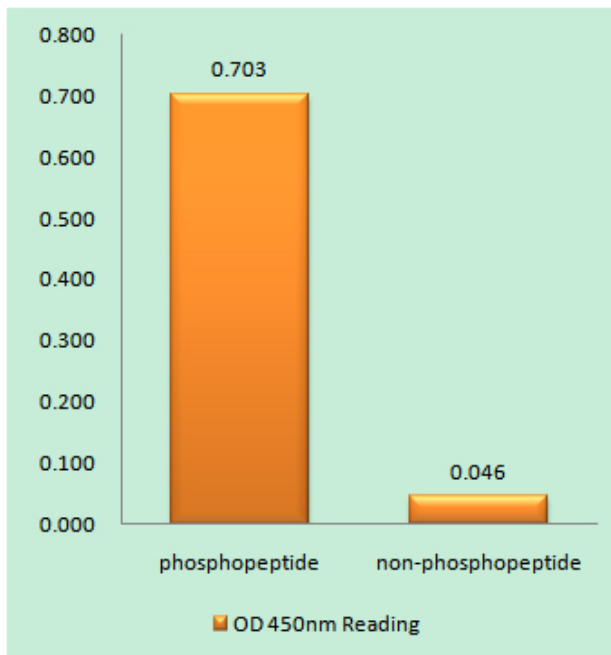
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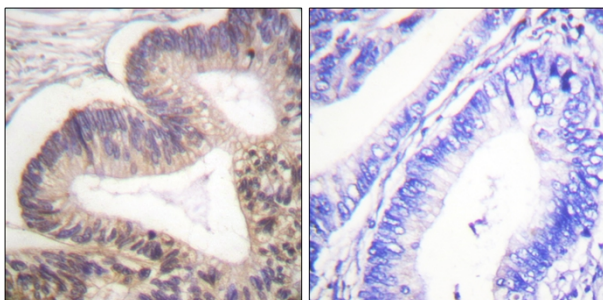
Products Images



Western Blot analysis of 293 cells using Phospho-PAKγ (S20) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PAK2 (Phospho-Ser20) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using PAK2 (Phospho-Ser20) Antibody. The picture on the right is blocked with the phospho peptide.

PAK2
(pSer20)

-85

-47

-36

-26

(kd)

Western blot analysis of lysates from 293 cells treated with Sorbitol 0.4M 30', using PAK2 (Phospho-Ser20) Antibody. The lane on the right is blocked with the phospho peptide.