PAK2 (Phospho-Ser141) Antibody

Catalog No: #12117

Package Size: #12117-1 50ul #12117-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

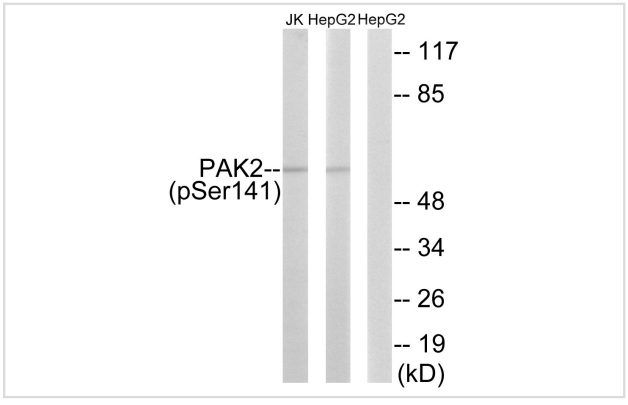
Description

Product Name	PAK2 (Phospho-Ser141) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of PAK2 only when phosphorylated at serine 141.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of serine 141 (Y-L-S(p)-F-T) derived from Human PAK2.
Target Name	PAK2
Modification	Phospho
Other Names	EC 2.7.11.1; gamma-PAK; kinase PAK2; P21-activated kinase 2; p21-activated kinase 2; p21-activated protein kinase I; PAK 2; PAK-2; PAK65; PAKI; S6/H4 kinase
Accession No.	Swiss-Prot#:Q13177;NCBI Gene#:5062
SDS-PAGE MW	60kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from HepG2 cells treated with Adriamycin (0.5uM, 24hours) and Jurkat cells treated with PMA (125ng/ml, 30mins) using PAK2 (Phospho-Ser141) antibody #12117. The lane on the right is treated with the synthesized peptide.

Background

Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell motility, cell cycle progression, apoptosis or proliferation. Acts as downstream effector of the small GTPases CDC42 and RAC1. Activation by the binding of active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Full-length PAK2 stimulates cell survival and cell growth. Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration. Phosphorylates JUN and plays an important role in EGF-induced cell proliferation. Phosphorylates many other substrates including histone H4 to promote assembly of H3.3 and H4 into nucleosomes, BAD, ribosomal protein S6, or MBP. Additionally, associates with ARHGEF7 and GIT1 to perform kinase-independent functions such as spindle orientation control during mitosis. On the other hand, apoptotic stimuli such as DNA damage lead to caspase-mediated cleavage of PAK2, generating PAK-2p34, an active p34 fragment that translocates to the nucleus and promotes cellular apoptosis involving the JNK signaling pathway.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.