

PAK2 Antibody
Rabbit mAb
Catalog # AP91582

Specification

PAK2 Antibody - Product Information

Application	WB, IHC, FC, ICC
Primary Accession	Q13177
Reactivity	Rat
Clonality	Monoclonal
Other Names	
CB422; Gamma PAK; hPAK65; p27; p34; p58; p65PAK; PAK-2p34; Pak2; PAK65; PAKgamma; S6 H4 kinase;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	58043 Da

PAK2 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PAK2
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

PAK2 Antibody - Protein Information

Name PAK2

Function

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 (PubMed: [12853446](http://www.uniprot.org/citations/12853446), PubMed: [16617111](http://www.uniprot.org/citations/16617111), PubMed: [19273597](http://www.uniprot.org/citations/19273597), PubMed: [19923322](http://www.uniprot.org/citations/19923322), PubMed: [33693784](http://www.uniprot.org/citations/33693784), PubMed: [7744004](http://www.uniprot.org/citations/7744004)),

PubMed: 9171063). Acts as a downstream effector of the small GTPases CDC42 and RAC1 (PubMed: 7744004). 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 (PubMed: 7744004). Full-length PAK2 stimulates cell survival and cell growth (PubMed: 7744004). Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration (PubMed: 21317288). Phosphorylates JUN and plays an important role in EGF-induced cell proliferation (PubMed: 21177766). Phosphorylates many other substrates including histone H4 to promote assembly of H3.3 and H4 into nucleosomes, BAD, ribosomal protein S6, or MBP (PubMed: 21724829). Phosphorylates CASP7, thereby preventing its activity (PubMed: 21555521, PubMed: 27889207). Additionally, associates with ARHGEF7 and GIT1 to perform kinase-independent functions such as spindle orientation control during mitosis (PubMed: 19273597, PubMed: 19923322). 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 (PubMed: 12853446, PubMed: 16617111, PubMed: 9171063). Caspase-activated PAK2 phosphorylates MKNK1 and reduces cellular translation (PubMed: 15234964).

Cellular Location

[Serine/threonine-protein kinase PAK 2]: Cytoplasm Nucleus Note=MYO18A mediates the cellular distribution of the PAK2-ARHGEF7-GIT1 complex to the inner surface of the cell membrane

Tissue Location

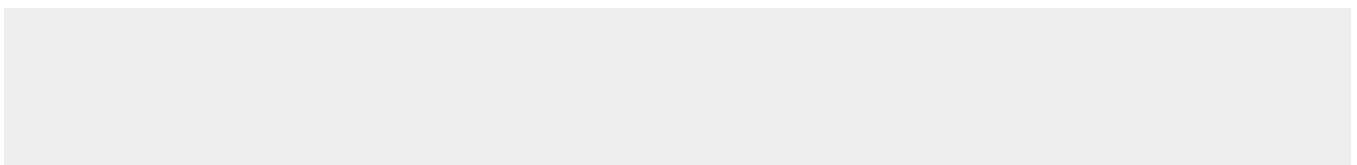
Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen

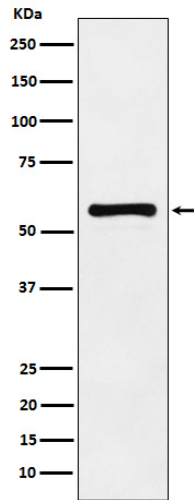
PAK2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PAK2 Antibody - Images





Western blot analysis of PAK2 expression in HeLa cell lysate.