

Anti-PAK2 (pS20) Antibody
Rabbit polyclonal antibody to PAK2 (pS20)
Catalog # AP59651

Specification

Anti-PAK2 (pS20) Antibody - Product Information

Application	WB
Primary Accession	O13177
Other Accession	O8CIN4
Reactivity	Human, Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58043

Anti-PAK2 (pS20) Antibody - Additional Information

Gene ID 5062

Other Names

Serine/threonine-protein kinase PAK 2; Gamma-PAK; PAK65; S6/H4 kinase; p21-activated kinase 2; PAK-2; p58

Target/Specificity

Recognizes endogenous levels of PAK2 (pS20) protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-PAK2 (pS20) 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](http://www.uniprot.org/citations/9171063)). Acts as a downstream effector of the small GTPases CDC42 and RAC1 (PubMed: [7744004](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/7744004)). Full-length PAK2 stimulates cell survival and cell growth (PubMed: [7744004](http://www.uniprot.org/citations/7744004)). Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration (PubMed: [21317288](http://www.uniprot.org/citations/21317288)). Phosphorylates JUN and plays an important role in EGF-induced cell proliferation (PubMed: [21177766](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21724829)). Phosphorylates CASP7, thereby preventing its activity (PubMed: [21555521](http://www.uniprot.org/citations/21555521)), PubMed: [27889207](http://www.uniprot.org/citations/27889207)). Additionally, associates with ARHGEF7 and GIT1 to perform kinase-independent functions such as spindle orientation control during mitosis (PubMed: [19273597](http://www.uniprot.org/citations/19273597), PubMed: [19923322](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/12853446), PubMed: [16617111](http://www.uniprot.org/citations/16617111), PubMed: [9171063](http://www.uniprot.org/citations/9171063)). Caspase-activated PAK2 phosphorylates MKNK1 and reduces cellular translation (PubMed: [15234964](http://www.uniprot.org/citations/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

Anti-PAK2 (pS20) 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](#)

Anti-PAK2 (pS20) Antibody - Images





Western blot analysis of PAK2 (pS20) expression in mouse liver (A) whole cell lysates.

Anti-PAK2 (pS20) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human PAK2. The exact sequence is proprietary.