

**PAK2 Rabbit mAb**  
**Catalog # AP75868****Specification**

---

**PAK2 Rabbit mAb - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P              |
| Primary Accession | <a href="#">Q13177</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Monoclonal Antibody    |
| Calculated MW     | 58043                  |

**PAK2 Rabbit mAb - Additional Information****Gene ID** 5062**Other Names**  
PAK2**Dilution**  
WB~~1/500-1/1000  
IHC-P~~N/A**Format**  
Liquid**PAK2 Rabbit mAb - 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:<a href="http://www.uniprot.org/citations/21317288" target="\_blank">21317288</a>). Phosphorylates JUN and plays an important role in EGF-induced cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/21177766" target="\_blank">21177766</a>). Phosphorylates many other substrates including histone H4 to promote assembly of H3.3 and H4 into nucleosomes, BAD, ribosomal protein S6, or MBP (PubMed:<a href="http://www.uniprot.org/citations/21724829" target="\_blank">21724829</a>). Phosphorylates CASP7, thereby preventing its activity (PubMed:<a href="http://www.uniprot.org/citations/21555521" target="\_blank">21555521</a>, PubMed:<a href="http://www.uniprot.org/citations/27889207" target="\_blank">27889207</a>). Additionally, associates with ARHGEF7 and GIT1 to perform kinase-independent functions such as spindle orientation control during mitosis (PubMed:<a href="http://www.uniprot.org/citations/19273597" target="\_blank">19273597</a>, PubMed:<a href="http://www.uniprot.org/citations/19923322" target="\_blank">19923322</a>). 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:<a href="http://www.uniprot.org/citations/12853446" target="\_blank">12853446</a>, PubMed:<a href="http://www.uniprot.org/citations/16617111" target="\_blank">16617111</a>, PubMed:<a href="http://www.uniprot.org/citations/9171063" target="\_blank">9171063</a>). Caspase-activated PAK2 phosphorylates MKNK1 and reduces cellular translation (PubMed:<a href="http://www.uniprot.org/citations/15234964" target="\_blank">15234964</a>).

### 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 Rabbit mAb - 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 Rabbit mAb - Images



