

## PAK2 Antibody

*PAK2 (NT): p21-activated kinase 2, PAK65*

**CATALOG NO.: 3887**

### BACKGROUND:

The p21-activated kinases (PAKs) are serine-threonine kinases that bind to the active forms of Cdc42 and Rac (1). They are divided into two groups, the first of which include PAK1, 2 and 3, and can be activated by Cdc42/Rac binding. Group 1 PAKs contain an autoinhibitory domain whose activity is regulated by Cdc42/Rac binding. The group 1 PAKs are known to be involved in cellular processes such as gene transcription, apoptosis, and cell morphology and motility. Much less is known about the second group, which includes PAK4, 5 and 6, and are not activated by Cdc42/Rac binding. Of the six PAK proteins, only PAK2 is ubiquitously expressed and cleaved by caspase-3. This cleavage removes the amino-terminal regulatory domain and generates a constitutively active kinase fragment (2). Recent experiments have shown that following cleavage, the active fragment is myristoylated and directed to the plasma membrane and membrane ruffles where it promotes cell death via increased signaling through the c-Jun N-terminal kinase pathway, but without compromising mitochondrial integrity (3).

### SOURCE:

Rabbit polyclonal PAK2 antibody was raised against a 14 amino acid peptide from near the amino terminus of human PAK2 (Genbank accession No. NP\_002568).

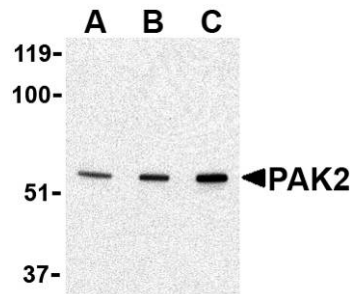
### APPLICATION:

PAK2 antibody can be used for the detection of PAK2 by Western blot at 0.5 – 1 µg/ml. (Optimal dilution should be determined by user.) Jurkat lysate can be used as positive control. PAK2 antibody is human, mouse and rat reactive.

**This product is for research use only.**

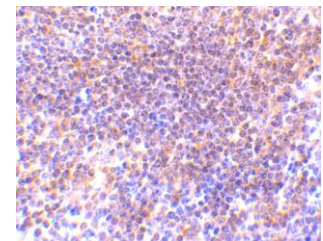
### STORAGE:

PAK2 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of PAK2 in Jurkat lysate with PAK2 antibody at (A) 0.5, (B) 1 and (C) 2 µg/ml.

Immunohistochemistry of PAK2 in mouse spleen tissue with PAK2 antibody at 10 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **3887P**.  
Jurkat cell lysate, Catalog No. **1205**.  
PAK2 Antibody (CT), Catalog No. **3885**.  
PAK 4 Antibody, Catalog No. **3077**.  
PAK5 Antibody, Catalog No. **3075**.  
PAK6 Antibody, Catalog No. **3073**.

### REFERENCES:

1. Jaffer ZM and Chernoff J. p21-activated kinases: three more join the Pak. *Int. J. Biochem. Cell Biol.* 2002; 34:713-7.
2. Rudel T and Bokoch GM. Membrane and morphological changes in apoptotic cells regulated by caspase-mediated activation of PAK2. *Science* 1997; 276:1571-4.
3. Vilas GL, Corvi MM, Plummer GJ, et al. Posttranslational myristoylation of caspase-activated p21-activated protein kinase 2 (PAK2) potentiates late apoptotic events. *Proc. Natl. Acad. Sci. USA* 2006; 103:6542-7.  
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