



# PAKy (phospho Ser192) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-14397                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Gene Name</b>                   | PAK2                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human PAK2 around the phosphorylation site of Ser192. AA range:158-207                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>                 | Phospho-PAKy (S192) Polyclonal Antibody detects endogenous levels of PAKy protein only when phosphorylated at S192.                                                                                                                                                                                                                                                                                              |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                            |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                               |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>                    | p21-activated kinase 2;p21 activated kinase 2;Gamma-PAK;Gamma PAK; EC:2.7.11.1;PAK2;Serine/threonine-protein kinase PAK 2;PAK65;S6/H4 kinase; PAK-2;p58                                                                                                                                                                                                                                                          |
| <b>Observed Band</b>               | 58kD                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Calculated Molecular Weight</b> | 58kD                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cell Pathway</b>                | [Serine/threonine-protein kinase PAK 2]: Cytoplasm. MYO18A mediates the cellular distribution of the PAK2-ARHGEF7-GIT1 complex to the inner surface of the cell membrane.; [PAK-2p34]: Nucleus. Cytoplasm, perinuclear region. Membrane; Lipid-anchor. Interaction with ARHGAP10 probably changes PAK-2p34 location to cytoplasmic perinuclear region. Myristoylation changes PAK-2p34 location to the membrane. |
| <b>Tissue Specificity</b>          | Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen.                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>                    | catalytic activity:ATP + a protein = ADP + a phosphoprotein..enzyme regulation:Activated by binding small G proteins. Binding of GTP-bound CDC42 or RAC1 to the autoregulatory region releases monomers from the autoinhibited dimer, enables phosphorylation of Thr-402 and allows the kinase domain to                                                                                                         |



adopt an active structure (By similarity). Following caspase cleavage, autophosphorylated PAK-2p34 is constitutively active.,function: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. Caspase-activated PAK-2p34 is involved in cell death response, probably involving the JNK signaling pathway. Cleaved PAK-2p34 seems to have a higher activity than the CDC42-activated for

#### Background

The p21 activated kinases (PAK) are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. The PAK proteins are a family of serine/threonine kinases that serve as targets for the small GTP binding proteins, CDC42 and RAC1, and have been implicated in a wide range of biological activities. The protein encoded by this gene is activated by proteolytic cleavage during caspase-mediated apoptosis, and may play a role in regulating the apoptotic events in the dying cell. [provided by RefSeq, Jul 2008],

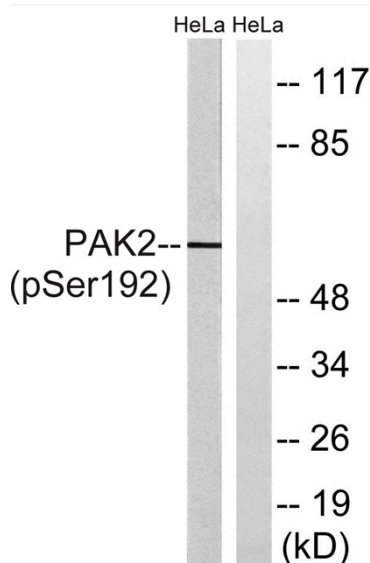
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of lysates from HeLa cells, using PAK2 (Phospho-Ser192) Antibody. The lane on the right is blocked with the phospho peptide.