

Product datasheet for R1547P

PAK1 pThr423 Rabbit Polyclonal Antibody

Product data:

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| Product Type: | Primary Antibodies |
| Applications: | ELISA |
| Recommended Dilution: | This phospho specific polyclonal antibody was tested by ELISA and was found to be reactive with the phosphorylated form of the immunizing peptide and minimally reactive with the non-phosphorylated form of the immunizing peptide. Although not tested, this antibody is likely functional in Immunohistochemistry, Immunoblotting, and Immunoprecipitation. Lysates from Jurkat cells or PAK transfected cells may be used as a control. This product has been assayed against 0.1 µg of phosphorylated peptide in a standard capture ELISA using TMB (3,3',5,5'-Tetramethylbenzidine) code as a substrate for 30 minutes at room temperature. A working dilution of 1:5,000 to 1:25,000 is suggested for this product. Less than 0.2% cross-reactivity was detected against the non-phosphorylated form of the immunizing peptide. |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Immunogen: | Human PAK 1/2/3 phospho peptide corresponding to a region of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH). |
| Specificity: | This affinity purified antibody is directed against human PAK (p21-GTPase Activated Protein Kinase). The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide. This phospho specific polyclonal antibody is specific for phosphorylated pT423 of Human PAK 1/2/3. Reactivity with non-phosphorylated PAK 1/2/3 is less than 1% by ELISA. Cross reactivity with PAK 1/2/3 from other species has not been determined. |
| Formulation: | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 with 0.01% (w/v) Sodium Azide as preservative. State: Aff - Purified State: Liquid (sterile filtered) purified Ig fraction. |
| Concentration: | lot specific |



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| Purification: | Immunoaffinity chromatography. |
| Conjugation: | Unconjugated |
| Storage: | Store vial at -20°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20°C or below. Avoid cycles of freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Gene Name: | p21 (RAC1) activated kinase 1 |
| Database Link: | Entrez Gene 5058 Human Q13153 |
| Background: | The p21-activated kinases (PAKs) are a family of multifunctional serine/threonine kinases involved in a variety of cell functions including stress response, apoptosis and regulation of cell motility and tumor metastasis. Mammalian PAKs are called 1, 2, 3 or α , γ , β respectively. PAKs are part of a large family of kinases where the catalytic domain of the kinase is related to Ste20 kinase of <i>S. cerevisiae</i> . Pak activity is regulated by specific binding of GTP-bound Rac and cdc42 GTPases and also by sphingosine and related lipids. PAK1 activation is induced by a variety of growth factors and G-protein-coupled receptors, Fc receptors, and integrins. This antibody is specific for the phosphorylated form of PAK 1/2/3. The selected peptide sequence used to generate the polyclonal antibody is common to all human PAKs. |
| Synonyms: | PAK 1, PAK-1, Alpha-PAK, PAK alpha, p21-activated kinase 1, p65-PAK, PAK 2, PAK-2, Gamma-PAK, PAK gamma, PAK65, p21-activated kinase 2, p58, PAK 3, PAK-3, Beta-PAK, PAK beta, p21-activated kinase 3, Oligophrenin-3, OPHN3 |
| Protein Families: | Druggable Genome, Protein Kinase, Stem cell - Pluripotency |
| Protein Pathways: | Axon guidance, Chemokine signaling pathway, Epithelial cell signaling in <i>Helicobacter pylori</i> infection, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway |