

**Datasheet for 600-401-X21****PAK 1 Phospho T84 Antibody****Overview**

|                      |                                                 |
|----------------------|-------------------------------------------------|
| <b>Description:</b>  | Anti-PAK-1 pT84 (RABBIT) Antibody - 600-401-X21 |
| <b>Item No.:</b>     | 600-401-X21                                     |
| <b>Size:</b>         | 100 µL                                          |
| <b>Applications:</b> | WB                                              |
| <b>Reactivity:</b>   | Human, Mouse, Rat                               |
| <b>Host Species:</b> | Rabbit                                          |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <b>Background:</b>   | PAKs, p21 activated kinases, are a family of serine/threonine protein kinases comprised of six isoforms, PAK1-6, and they play important roles in cytoskeleton dynamics, cell survival and proliferation. Each of these isoforms contains a C-terminal catalytic domain and an N-terminal regulatory domain with a small G protein binding motif. OSR1, oxidative stress response 1, is activated only by osmotic stresses, like sorbitol or NaCl. It has been predicted that OSR1 phosphorylates PAK1 in the regulatory domain at thr84 and inhibits activation of JNK and MAPK pathway. It has also been suggested that OSR1 may have a regulating function with actin cytoskeleton because it can phosphorylate PAK1 at thr84 and bind to gelsolin. PAK1 pT84 Antibody is ideal for researchers interested in cell cycle research. |
| <b>Synonyms:</b>     | Serine/Threonine-protein kinase PAK 1, Alpha-PAK, p21-activated kinase 1, p65-PAK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**Target Details**

|                         |                    |
|-------------------------|--------------------|
| <b>Gene Name:</b>       | PAK1               |
| <b>Reactivity:</b>      | Human, Mouse, Rat  |
| <b>PTM Specificity:</b> | Phosphorylation    |
| <b>Immunogen Type:</b>  | Conjugated Peptide |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-Phospho-Thr84 PAK1 Antibody was produced in rabbits by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding the phospho-Thr84 of human PAK1 conjugated to KLH.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity/Specificity:</b> | Anti-Phospho-Thr84 PAK1 Antibody is directed against PAK1 protein phosphorylated at T84. The antibody was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum. This antibody is specific for phosphorylated PAK1. Minimal reactivity occurs against non-phosphorylated PAK1. Reactivity against PAK1 occurs from human sources. However, reactivity is also expected against bovine, canine, chicken, non-human primates, sheep, and zebra fish based on 100% sequence homology. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q13153</a></li><li>• <a href="#">GeneID - 5058</a></li><li>• <a href="#">NCBI - NP_001122092.1</a></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Application Details

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| <b>Tested Applications:</b> | WB                                                                                                                                                                                                 |
| <b>Application Note:</b>    | Anti-Phospho-Thr84 PAK1 Antibody is tested for Western Blots and is specific for the ~68 kDa PAK1 phosphorylated at Thr84. Specific conditions for reactivity should be optimized by the end user. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                    |
| <b>ELISA:</b>               | 1:10,000                                                                                                                                                                                           |
| <b>WB:</b>                  | 1:1000                                                                                                                                                                                             |

## Formulation

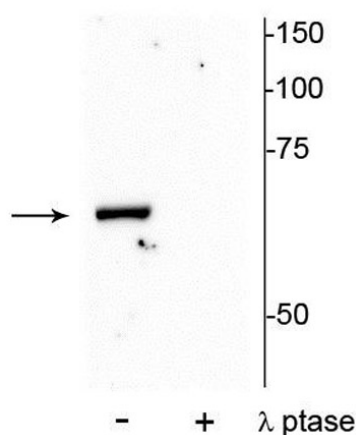
|                        |                                                                                  |
|------------------------|----------------------------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                                        |
| <b>Buffer:</b>         | 0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5                                     |
| <b>Preservative:</b>   | None                                                                             |
| <b>Stabilizer:</b>     | 0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol |

## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Wet Ice |
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|                           |                                                                                                                                                                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Condition:</b> | Store vial at -20° C prior to opening in undiluted aliquots. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. |
| <b>Expiration:</b>        | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                  |

## Images



### Western Blot

Western blot of Anti-PAK-1 pT84 Antibody.

Mouse hippocampal lysate showing specific immunolabeling of the ~68 kDa PAK1 protein phosphorylated at Thr84 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is completely eliminated by lysate treatment with lambda phosphatase ( $\lambda$ -Ptase, 800 units/mg protein for 30 minutes).

## Disclaimer

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