10320 Camino Santa Fe, Suite G
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Phospho-Thr84 PAK1 Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1253

Specification

Phospho-Thr84 PAK1 Antibody - Product Information

Application	**WB**
Primary Accession	Q13153
Reactivity	**Human, Mouse**
Predicted	**Bovine, Chicken, Monkey, Rat, Zebrafish**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**68 KDa**

Phospho-Thr84 PAK1 Antibody - Additional Information

Gene ID	**5058**
Gene Name	**PAK1**

Other Names
Serine/threonine-protein kinase PAK 1, Alpha-PAK, p21-activated kinase 1, PAK-1, p65-PAK, PAK1

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr84 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.

Antibody Specificity
Specific for the ~68k PAK1 phosphorylated at Thr84.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Phospho-Thr84 PAK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Phospho-Thr84 PAK1 Antibody - Protocols

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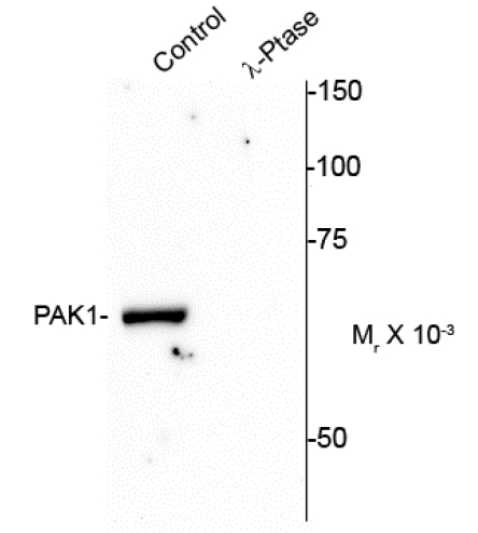
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Thr84 PAK1 Antibody - Images



Western blot of mouse hippocampal lysate showing specific immunolabeling of the ~68k PAK1 protein phosphorylated at Thr84 (control). Phosphospecificity is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that the lysate was incubated in λ-Ptase (800 units/1mg proteinfor30min).Theimmunolabelingiscompletelyeliminatedbytreatmentwithλ-Ptase.

Phospho-Thr84 PAK1 Antibody - Background

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 (Ye et al, 2012). Each of these isoforms contains a C-terminal catalytic domain and an N-terminal regulatory domain with a small G protein binding motif (Chen et al, 2004). OSR1, oxidative stress response 1, is activated only by osmotic stresses, like sorbital or NaCl (Chen et al, 2004). It has been predicted that OSR1 phosphorylates PAK1 in the regulatory domain at thr84 and inhibits activation of JNK and MAPK pathway. (Chen et al, 2004). 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 (Chen et al, 2004).

Phospho-Thr84 PAK1 Antibody - References

Chen W, Yazicioglu M, Cobb MH (2004) Characterization of OSR1, a member of the mammalian Ste20p/germinal center kinase family. J of Biol Chem 279 (12):11129-36.
Ye D, Field J (2012) PAK signaling in cancer. Cell Logist 2(2):105-116.