

PAK3 Antibody (N-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS12359

Specification

PAK3 Antibody (N-Terminus) - Product Information

Application IHC
Primary Accession 075914

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 62kDa KDa

PAK3 Antibody (N-Terminus) - Additional Information

Gene ID 5063

Other Names

Serine/threonine-protein kinase PAK 3, 2.7.11.1, Beta-PAK, Oligophrenin-3, p21-activated kinase 3, PAK-3, PAK3, OPHN3

Target/Specificity

synthetic peptide corresponding to N-terminal residues of human PAK3 (Serine/threonine-protein kinase PAK 3)

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

PAK3 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PAK3 Antibody (N-Terminus) - Protein Information

Name PAK3

Synonyms OPHN3

Function

Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, or cell cycle regulation. Plays a role in dendrite spine morphogenesis as well as synapse formation and plasticity. Acts as a downstream effector of the small GTPases CDC42 and RAC1. Activation by the binding of active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration. Additionally, phosphorylates TNNI3/troponin I to modulate calcium sensitivity and relaxation kinetics of thin myofilaments. May also be involved in early neuronal development. In hippocampal neurons, necessary for the



formation of dendritic spines and excitatory synapses; this function is dependent on kinase activity and may be exerted by the regulation of actomyosin contractility through the phosphorylation of myosin II regulatory light chain (MLC) (By similarity).

Cellular Location Cytoplasm.

Tissue Location

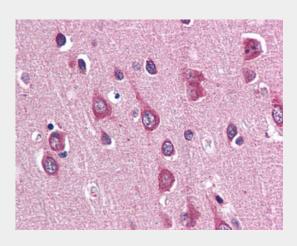
Restricted to the nervous system. Highly expressed in postmitotic neurons of the developing and postnatal cerebral cortex and hippocampus.

PAK3 Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PAK3 Antibody (N-Terminus) - Images



Anti-PAK3 antibody IHC of human brain, cortex.

PAK3 Antibody (N-Terminus) - Background

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PAK3 Antibody (N-Terminus) - References





Allen K.M.,et al.Nat. Genet. 20:25-30(1998). Jiang C.,et al.Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases. Kitano T.,et al.Mol. Biol. Evol. 20:1281-1289(2003). Kreis P.,et al.J. Neurochem. 106:1184-1197(2008). Ota T.,et al.Nat. Genet. 36:40-45(2004).