

PAK3 Blocking Peptide
Catalog # PBV10311b**Specification**

PAK3 Blocking Peptide - Product Information

Primary Accession	O75914
Gene ID	5063
Calculated MW	62310

PAK3 Blocking Peptide - Additional Information**Gene ID** 5063**Application & Usage**

The peptide is used for blocking the antibody activity of active PAK3. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at 37°C

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

PAK3

Formulation

50 µg (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

PAK3 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

PAK3 Blocking Peptide - 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 Blocking Peptide - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PAK3 Blocking Peptide - Images