

# PAK3 Rabbit mAb

Catalog # AP77797

#### **Product Information**

**Application** WB, IHC-P, IF, ICC, IP

Primary Accession <u>075914</u>

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human PAK3

**Purification** Affinity Chromatography

Calculated MW 62310

## **Additional Information**

**Gene ID** 5063

Other Names PAK3

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

#### **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).

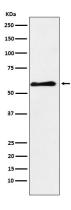
**Cellular Location** 

Cytoplasm.

**Tissue Location** 

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

### **Images**



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.