

# Phospho-PAK1/2/3 (Ser144/Ser141/Ser154) Rabbit mAb

Catalog # AP75866

#### Specification

## Phospho-PAK1/2/3 (Ser144/Ser141/Ser154) Rabbit mAb - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IHC-F, IF, ICC, IP <u>075914</u> Human, Mouse, Rat Rabbit Monoclonal Antibody

## Phospho-PAK1/2/3 (Ser144/Ser141/Ser154) Rabbit mAb - Additional Information

Gene ID 5063

Other Names PAK3

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

Format Liquid

## Phospho-PAK1/2/3 (Ser144/Ser141/Ser154) Rabbit mAb - 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.

## Phospho-PAK1/2/3 (Ser144/Ser141/Ser154) Rabbit mAb - Protocols

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

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

### Phospho-PAK1/2/3 (Ser144/Ser141/Ser154) Rabbit mAb - Images





