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# Anti-PAK3 (pS154) Antibody

Rabbit polyclonal antibody to PAK3 (pS154) Catalog # AP59652

#### **Product Information**

Application WB
Primary Accession O75914
Other Accession O61036

**Reactivity** Human, Mouse, Rat, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 62310

#### **Additional Information**

**Gene ID** 5063

Other Names OPHN3; Serine/threonine-protein kinase PAK 3; Beta-PAK; Oligophrenin-3;

p21-activated kinase 3; PAK-3

**Target/Specificity** Recognizes endogenous levels of PAK3 (pS154) protein.

**Dilution** WB~~WB (1/500 - 1/1000)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### **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.

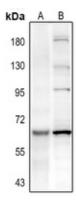
**Tissue Location** Restricted to the nervous system. Highly expressed in postmitotic neurons of

the developing and postnatal cerebral cortex and hippocampus.

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PAK3. The exact sequence is proprietary.

### **Images**



Western blot analysis of PAK3 (pS154) expression in BV2 (A), SKOVCAR3 (B), U87MG (C) whole cell lysates.

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