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

Catalog # AP75866

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, IP
Primary Accession	O75914
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	62310

Additional Information

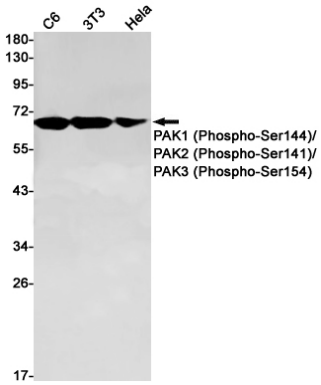
Gene ID	5063
Other Names	PAK3
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A IF~~1/50-1/200 ICC~~N/A IP~~N/A
Format	Liquid

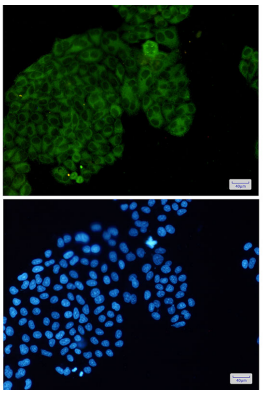
Protein Information

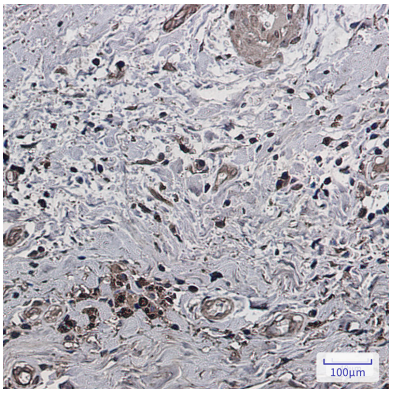
Name	PAK3
Synonyms	OPHN3
Function	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, or cell cycle regulation. Plays a role in dendrite spine morphogenesis as well as synapse formation and plasticity. Acts 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







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