PAK1/2/3 (Ab-423/402/421) Antibody

Catalog No: #33140

Package Size: #33140-1 50ul #33140-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

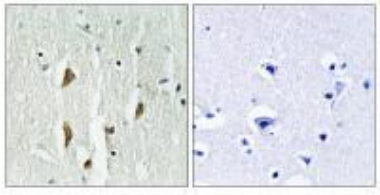
Product Name	PAK1/2/3 (Ab-423/402/421) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total PAK1/2/3 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized non-phosphopeptide derived from human PAK1/2/3 around the phosphorylation site of threonine 423/402/421 (R-S-T(p)-M-V).
Target Name	PAK1/2/3
Other Names	EC 2.7.11.1; Gamma-PAK; P21-activated kinase 2; PAK 2; PAK-2
Accession No.	Swiss-Prot: Q13153/Q13177/O75914NCBI Gene ID: 5058/5062/5063
Uniprot	Q13153
GeneID	5058;
SDS-PAGE MW	62kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

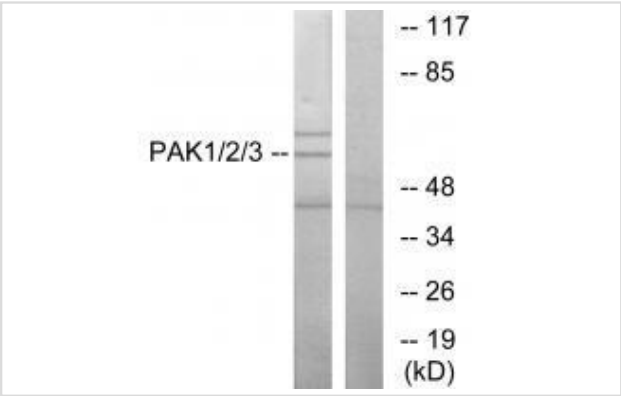
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

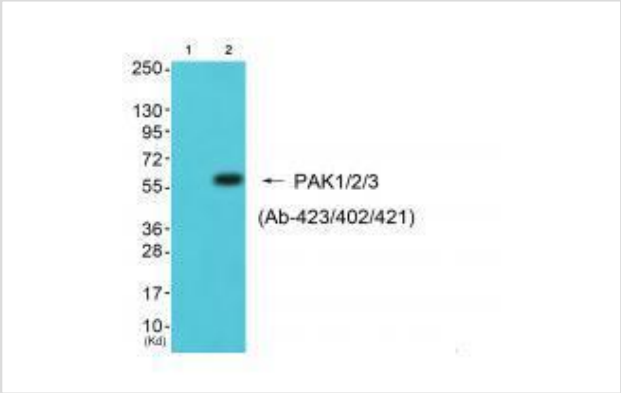
Images



Immunohistochemistry analysis of paraffin-embedded human brain tissue using PAK1/2/3 (Ab-423/402/421) antiobdy #33140.



Western blot analysis of extracts from NIH-3T3 cells, using PAK1/2/3 (Ab-423/402/421) antibody #33140.



Western blot analysis of extracts from 293 cells (Lane 2), using PAK1/2/3 (Ab-423/402/421) antiobdy #33140. The lane on the left is treated with synthesized peptide.

Background

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 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.

Bernadett Boda, J. Neurosci., Dec 2004; 24: 10816 - 10825.
Donna L. McPhie, J. Neurosci., Jul 2003; 23: 6914.
Jin-Hun Jung, J. Biol. Chem., Dec 2005; 280: 40025 - 40031.
Guo-Lei Zhou, Mol. Cell. Biol., Nov 2003; 23: 8058 - 8069.

Note: This product is for in vitro research use only