

ARG51663 anti-PAK1 / PAK2 / PAK3 phospho (Thr423 / Thr402 / Thr421) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PAK1 / PAK2 / PAK3 phospho (Thr423 / Thr402 / Thr421)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PAK1 / PAK2 / PAK3
Species	Human
Immunogen	Peptide sequence around phosphorylation site of threonine 423 /402/421 (R-S-T(p)-M-V) derived from Human PAK1/PAK2/PAK3.
Conjugation	Un-conjugated
Alternate Names	beta-PAK; bPAK; MRX30; PAK3beta; OPHN3; Oligophrenin-3; MRX47; Serine/threonine-protein kinase PAK 3; EC 2.7.11.1; PAK-3; p21-activated kinase 3; Beta-PAK

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

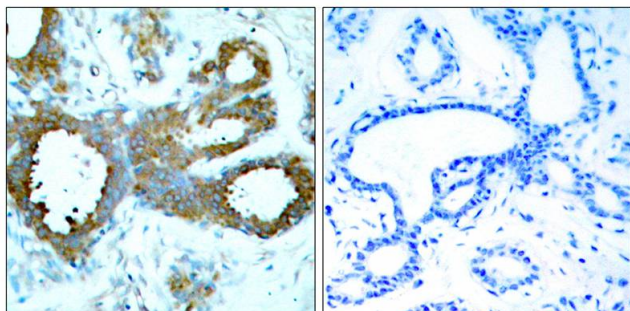
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

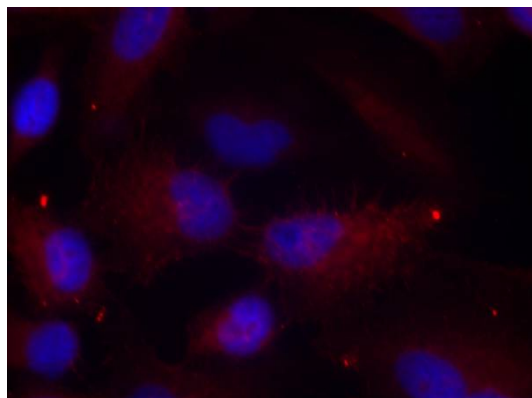
Gene Symbol	PAK3
Gene Full Name	p21 protein (Cdc42/Rac)-activated kinase 3
Background	The activated kinase acts on a variety of targets. Likely to be the GTPase effector that links the Rho-related GTPases to the JNK MAP kinase pathway. Activated by CDC42 and RAC1. Involved in dissolution of stress fibers and reorganization of focal complexes. Involved in regulation of microtubule biogenesis through phosphorylation of TBCB. Activity is inhibited in cells undergoing apoptosis, potentially due to binding of CDC2L1 and CDC2L2.
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 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. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Microbiology and Infectious Disease antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	62 kDa
PTM	Autophosphorylated when activated by CDC42/p21. Neddylated.

Images



ARG51663 anti-PAK1 / PAK2 / PAK3 phospho (Thr423 / Thr402 / Thr421) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51663 anti-PAK1 / PAK2 / PAK3 phospho (Thr423 / Thr402 / Thr421) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51663 anti-PAK1 / PAK2 / PAK3 phospho (Thr423 / Thr402 / Thr421) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51663 anti-PAK1 / PAK2 / PAK3 phospho (Thr423 / Thr402 / Thr421) antibody.