

Rabbit PAK1/2/3 Polyclonal Antibody | anti-PAK3 antibody

Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323687	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PAK1/2/3; Polyclonal Antibody; Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Antibody; Alpha PAK; Beta PAK; bPAK; CDKN1A; Gamma PAK; hPAK3; MRX30; MRX47; Oligophrenin 3; OPHN3; P21 (CDKN1A) activated kinase 2; P21 (CDKN1A) activated kinase 3; p21 activated kinase 1; p21 activated kinase 2; p21 activated kinase 3; P21 protein (Cdc42/Rac) activated kinase 1; P21 protein (Cdc42/Rac) activated kinase 2; P21 protein (Cdc42/Rac) activated kinase 3; P21/Cdc42/Rac1 activated kinase 1 (STE20 homolog; yeast); P21/Cdc42/Rac1 activated kinase 1 (yeast Ste20 related); P58; P65 PAK; PAK 2; PAK 3; PAK1; PAK2; PAK3; PAK3beta; PAK65; PAKalpha; PAKgamma; S6/H4 kinase; Serine/threonine protein kinase PAK 1; Serine/threonine protein kinase PAK 2; Serine/threonine protein kinase PAK 3; Serine/threonine protein kinase PAK1; Serine/threonine protein kinase PAK2; Serine/threonine protein kinase PAK3; STE20 homolog; yeast; ADRB2; Alpha-PAK; MGC130000; MGC130001; p21 protein (Cdc42/Rac) activated kinase 1; p21-activated kinase 1; p21/Cdc42/Rac1 activated kinase 1 (yeast Ste20 related); p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog; p65 PAK; p65-PAK; P68-PAK; PAK alpha; PAK-1; Pak1; PAK1_HUMAN; Paka; Protein kinase MUK2; Rac/p21-activated kinase; Serine/threonine-protein kinase PAK 1; STE20 homolog yeast; C-t-PAK2; CB422; EC 2.7.11.1; Gamma-PAK; hPAK65; Kinase; p21 (CDKN1A) activated kinase 2; p21 (CDKN1A)-activated kinase 2a; p21 protein (Cdc42/Rac)-activated kinase 2; p21 protein Cdc42 Rac activated kinase 2; p21-activated kinase 2; p21-activated kinase; 65-KD; p21-activated protein kinase I; p21CDKN1A activated kinase 2; p27; p34; p58; p65PAK; PAK-2; PAK-2p34; Pak2; PAK2_HUMAN; S6 H4 kinase; Serine threonine protein kinase PAK 2; anti-PAK3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-PAK1/2/3 (S144+S141+S139) antibody detects endogenous levels of PAK1/2/3 only when phosphorylated at PS144+S141+S139
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	544
Applicable Applications for anti-PAK3 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Phospho-PAK1/2/3 (S144+S141+S139)
Subcellular Location	Cytoplasm. Recruited to focal adhesions upon activation
Tissue Specificity	Restricted to the nervous system. Highly expressed in postmitotic neurons of the developing and postnatal cerebral cortex and hippocampus.
Conjugation	Unconjugated
Epitope	Phospho Ser139, Phospho Ser144, Phospho Ser141
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA323687 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Phospho-PAK1/2/3 (S144+S141+S139) using HT-29 whole cell lysates



IHC (Immunohistochemistry)

AAA323687 at 1/100 staining Mouse colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PAK3 antibody

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.

Subunit Structure: Interacts tightly with GTP-bound but not GDP-bound CDC42/p21 and RAC1. Shows highly specific binding to the SH3 domains of phospholipase C-gamma and of adapter protein NCK. Interacts with the C-terminal of APP (By similarity). Interacts with ARHGEF6 and ARHGEF7.

Post-translational Modifications: Autophosphorylated when activated by CDC42/p21. Neddylated.

Similarity: Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	189491751
NCBI GeneID	5063
NCBI Accession #	NP_001121638.1
NCBI GenBank Nucleotide #	NM_001128166.2
UniProt Accession #	O75914; Q5JWX1; Q5JWX2; Q7Z2D6; Q7Z2E4; Q7Z3Z8; Q8WWK5; Q8WX23; A8K389; B1GX77; B1GX78; B1GX79
Molecular Weight	Observed: 65 kDa Predicted: 63 kDa
NCBI Official Full Name	serine/threonine-protein kinase PAK 3 isoform a
NCBI Official Synonym Full Names	p21 (RAC1) activated kinase 3
NCBI Official Symbol	PAK3
NCBI Official Synonym Symbols	ARA; bPAK; MRX30; MRX47; OPHN3; PAK-3; PAK3beta; beta-PAK
NCBI Protein Information	serine/threonine-protein kinase PAK 3

UniProt Protein Name	Serine/threonine-protein kinase PAK 3
UniProt Gene Name	PAK3
UniProt Synonym Gene Names	OPHN3; PAK-3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pak1-2-3-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/323687>