

Rabbit PAK2 Polyclonal Antibody | anti-PAK2 antibody

Phospho-PAK2 (Ser20) Antibody

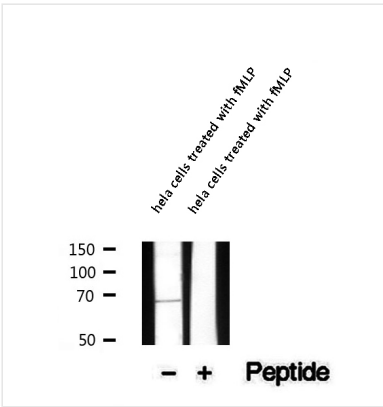
CATALOG # AAA321365	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

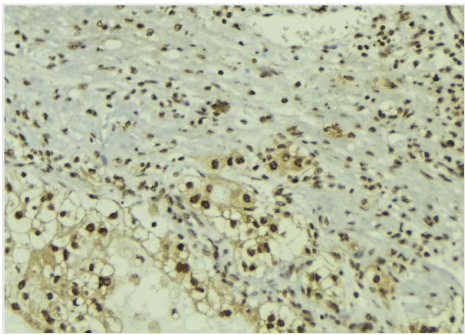
PAK2; Polyclonal Antibody; Phospho-PAK2 (Ser20) Antibody; C-t-PAK2; CB422; EC 2.7.11.1; Gamma PAK; Gamma-PAK; hPAK65; Kinase; p21 (CDKN1A) activated kinase 2; p21 (CDKN1A)-activated kinase 2a; p21 activated kinase 2; p21 protein (Cdc42/Rac)-activated kinase 2; p21 protein Cdc42 Rac activated kinase 2; 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-2; PAK-2p34; Pak2; PAK2_HUMAN; PAK65; PAKgamma; S6 H4 kinase; S6/H4 kinase; Serine threonine protein kinase PAK 2; Serine/threonine protein kinase PAK 2; anti-PAK2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-PAK2 (Ser20) antibody detects endogenous levels of PAK2.
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	524
Applicable Applications for anti-PAK2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PAK2 around the phosphorylation site of Ser20.
Subcellular Location	Nucleus
Tissue Specificity	Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Bovine (100%), Horse (92%), Sheep (100%), Rabbit (100%), Dog (100%)
Conjugation	Unconjugated
Epitope	Phospho Ser20
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis of extracts of hela cells treated with fMLP, using Phospho-PAK2 (Ser20) Antibody.



IHC (Immunohistochemistry)
AAA321365 at 1/100 staining Human breast cancer 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-PAK2 antibody	Function: Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell motility, cell cycle progression, apoptosis or proliferation. 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. Full-length PAK2 stimulates cell survival and cell growth. Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration. Phosphorylates JUN and plays an important role in EGF-induced cell proliferation. Phosphorylates many other substrates including histone H4 to promote assembly of H3.3 and H4 into nucleosomes, BAD, ribosomal protein S6, or MBP. Additionally, associates with ARHGEF7 and GIT1 to perform kinase-independent functions such as spindle orientation control during mitosis. On the other hand, apoptotic stimuli such as DNA damage lead to caspase-mediated cleavage of PAK2, generating PAK-2p34, an active p34 fragment that translocates to the nucleus and promotes cellular apoptosis involving the JNK signaling pathway. Caspase-activated PAK2 phosphorylates MKNK1 and reduces cellular translation. Subunit Structure: Interacts tightly with GTP-bound but not GDP-bound CDC42/p21 and RAC1. Interacts with SH3MD4. Interacts with and activated by HIV-1 Nef. Interacts with SCRIB. Interacts with ARHGEF7 and GIT1. PAK-2p34 interacts with ARHGAP10. Post-translational Modifications: Full-length PAK2 is autophosphorylated when activated by CDC42/p21. Following cleavage, both peptides, PAK-2p27 and PAK-2p34, become highly autophosphorylated, with PAK-2p27 being phosphorylated on serine and PAK-2p34 on threonine residues, respectively. Autophosphorylation of PAK-2p27 can occur in the absence of any effectors and is dependent on phosphorylation of Thr-402, because PAK-2p27 is acting as an exogenous substrate. During apoptosis proteolytically cleaved by caspase-3 or caspase-3-like proteases to yield active PAK-2p34. Ubiquitinated, leading to its proteasomal degradation. PAK-2p34 is myristoylated. Similarity: Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	32483399
NCBI GeneID	5062
NCBI Accession #	NP_002568.2
NCBI GenBank Nucleotide #	NM_002577.4
UniProt Accession #	Q13177; Q13154; Q6ISC3
Molecular Weight	Observed: 61-67 kDa Predicted: 59 kDa
NCBI Official Full Name	serine/threonine-protein kinase PAK 2
NCBI Official Synonym Full Names	p21 (RAC1) activated kinase 2

NCBI Official Symbol	PAK2
NCBI Official Synonym Symbols	PAK65; PAKgamma
NCBI Protein Information	serine/threonine-protein kinase PAK 2
UniProt Protein Name	Serine/threonine-protein kinase PAK 2
UniProt Gene Name	PAK2
UniProt Synonym Gene Names	PAK-2; p27; p34

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/pak2-antibody-immunohistochemistry-western-blot-elisa/321365>