Datasheet for ABIN7127664

Recombinant anti-PAK2 antibody

3 Images

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Overview

Quantity:	100 µL
Target:	PAK2
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This PAK2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP), Flow Cytometry (FACS)

Product Details

Immunogen:	A synthesized peptide derived from human PAK2
Clone:	6D12
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Affinity-chromatography

Target Details

Target:	PAK2
Alternative Name:	PAK2 (PAK2 Products)
Background:	Background: Serine/threonine protein kinase that plays a role in a variety of different signaling

Target Details

	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. Aliases: Serine/threonine-protein kinase PAK 2 (EC 2.7.11.1) (Gamma-PAK) (PAK65) (S6/H4 kinase) (p21-activated kinase 2) (PAK-2) (p58) [Cleaved into: PAK-2p27 (p27), PAK-2p34 (p34) (C-t-PAK2)], PAK2
UniProt:	Q13177
Pathways:	MAPK Signaling, RTK Signaling, TCR Signaling, Fc-epsilon Receptor Signaling Pathway, Regulation of Lipid Metabolism by PPARalpha

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, FC:1:20-1:200, IP:1:200-1:1000,
Restrictions:	For Research Use only

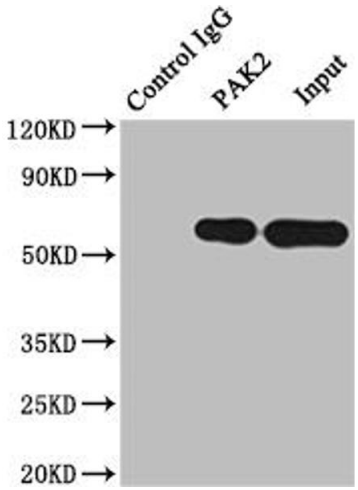
Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

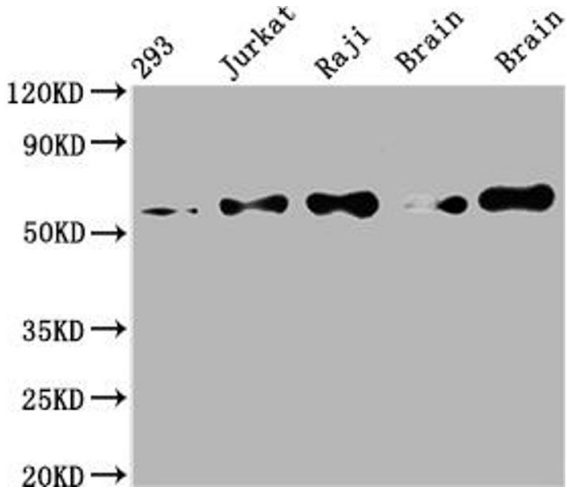
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



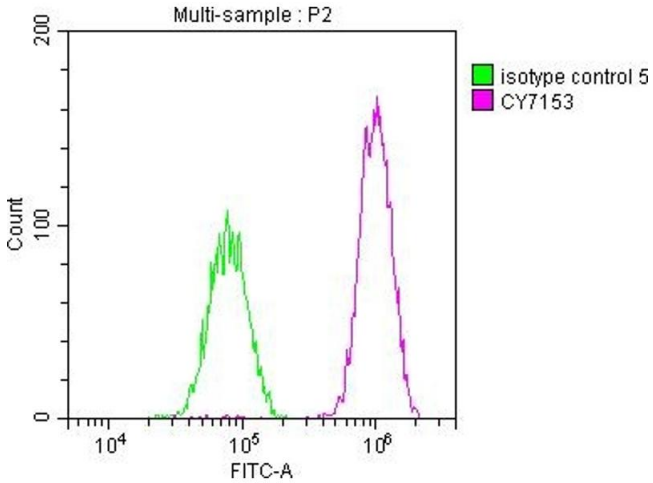
Western Blotting

Image 1. Immunoprecipitating PAK2 in Raji whole cell lysate Lane 1: Rabbit control IgG instead of ABIN7127664 in Raji whole cell lysate. For western blotting,a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: ABIN7127664(2 µg)+ Raji whole cell lysate(500 µg) Lane 3: Raji whole cell lysate (10 µg)



Western Blotting

Image 2. Western Blot Positive WB detected in: 293 whole cell lysate, Jurkat whole cell lysate, Raji whole cell lysate, Mouse brain tissue, Rat brain tissue All lanes: PAK2 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 59 kDa Observed band size: 59 kDa



Flow Cytometry

Image 3. Overlay histogram showing HepG2 cells stained with ABIN7127664 (red line) at 1:50. The cells were fixed with 70 % Ethylalcohol (18h) and then incubated in 10 % normal goat serum to block non-specific protein-protein interactions followedby the antibody (1 µg/1*106cells) for 1 h at 4 °C.The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30 min at 4 °C. Control antibody (green line) was Rabbit IgG (1 µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.