

Immunotag™ Phospho-PAK1 (Ser199/204)/PAK2 (Ser192/197) Antibody

Antibody Specification	
Catalog No.	ITA0708
Product Description	Immunotag™ Phospho-PAK1 (Ser199/204)/PAK2 (Ser192/197) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-PAK1 (Ser199/204)/PAK2 (Ser192/197)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC
Recommended Dilution	WB 1:500-1:2000, IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human PAK1 around the phosphorylation site of Ser199/204.
Specificity	Phospho-PAK1 (Ser199/204)/PAK2 (Ser192/197) Antibody detects endogenous levels of PAK1.
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	PAK1
Accession No.	Q13153/Q13177

Antibody Specification

Alternate Names	ADRB2; Alpha PAK; Alpha-PAK; MGC130000; MGC130001; p21 activated kinase 1; 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, yeast); p65 PAK; p65-PAK; P68-PAK; PAK alpha; PAK-1; Pak1; PAK1_HUMAN; Paka; PAKalpha; 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; 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;
Description	Protein kinase involved in intracellular signaling pathways downstream of integrins and receptor-type kinases that plays an important role in cytoskeleton dynamics, in cell adhesion, migration, proliferation, apoptosis, mitosis, and in vesicle-mediated transport processes. Can directly phosphorylate BAD and protects cells against apoptosis. Activated by interaction with CDC42 and RAC1. Functions as GTPase effector that links the Rho-related GTPases CDC42 and RAC1 to the JNK MAP kinase pathway. Phosphorylates and activates MAP2K1, and thereby mediates activation of downstream MAP kinases. Involved in the reorganization of the actin cytoskeleton, actin stress fibers and of focal adhesion complexes. Phosphorylates the tubulin chaperone TBCB and thereby plays a role in the regulation of microtubule biogenesis and organization of the tubulin cytoskeleton. Plays a role in the regulation of insulin secretion in response to elevated glucose levels. Part of a ternary complex that contains PAK1, DVL1 and MUSK that is important for MUSK-dependent regulation of AChR clustering during the formation of the neuromuscular junction (NMJ). Activity is inhibited in cells undergoing apoptosis, potentially due to binding of CDC2L1 and CDC2L2. Phosphorylates MYL9/MLC2. Phosphorylates RAF1 at 'Ser-338' and 'Ser-339' resulting in: activation of RAF1, stimulation of RAF1 translocation to mitochondria, phosphorylation of BAD by RAF1, and RAF1 binding to BCL2. Phosphorylates SNAI1 at 'Ser-246' promoting its transcriptional repressor activity by increasing its accumulation in the nucleus. In podocytes, promotes NR3C2 nuclear localization. Required for atypical chemokine receptor ACKR2-induced phosphorylation of LIMK1 and cofilin (CFL1) and for the up-regulation of ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation. In synapses, seems to mediate the regulation of F-actin cluster formation performed by SHANK3, maybe through CFL1 phosphorylation and inactivation. Plays a role in RUFY3-mediated facilitating gastric cancer cells migration and invasion (PubMed:25766321).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	61 to 67 (PAK2), 68 to 74 (PAK1/3)kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.