PAK1 (PT0342R) PT® Rabbit mAb

CatalogNo: YM8201 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat,

Applications
- WB,IHC,IF,IP,ELISA

MW
- 61kD (Calculated)

61kD (Observed)

Isotype
- IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1:1000
WB 1:1000-1:5000
IF 1:200-1:1000
ELISA 1:5000-1:20000
IP 1:50-1:200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Basic Information

Clonality	Monoclonal
Clone Number	PT0342R

Immunogen Information

Specificity	Endogenous

Target Information

Gene name PAK1

Protein Name Serine/threonine-protein kinase PAK 1

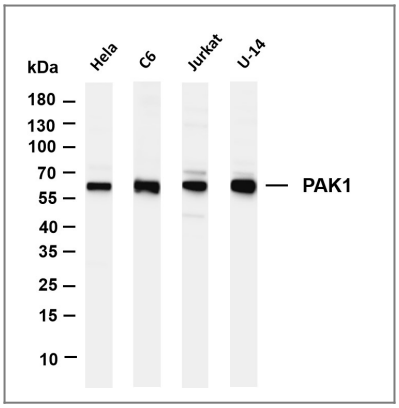
Organism	Gene ID	UniProt ID
Human	5058;	Q13153;
Mouse		O88643;
Rat	29431;	P35465;

Cellular Localization Cytoplasm

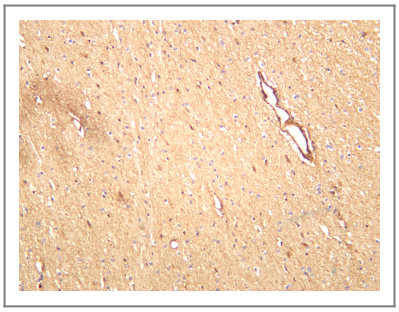
Tissue specificity Overexpressed in gastric cancer cells and tissues (at protein level) (PubMed:25766321).

Function Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Activated by binding small G proteins. Binding of GTP-bound CDC42 or RAC1 to the autoregulatory region releases monomers from the autoinhibited dimer, enables phosphorylation of Thr-423 and allows the kinase domain to adopt an active structure. Also activated by binding to GTP-bound CDC42, independent of the phosphorylation state of Thr-423. Phosphorylation of Thr-84 by OXSR1 inhibits this activation.,Function: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.,PTM:Autophosphorylated when activated by CDC42/p21 and RAC1.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.,similarity:Contains 1 CRIB domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Recruited to focal adhesions upon activation.,subunit:Homodimer in its autoinhibited state. Active as monomer. Interacts tightly with GTP-bound but not GDP-bound CDC42/P21 and RAC1. Binds to the caspase-cleaved p110 isoform of CDC2L1 and CDC2L2, p110C, but not the full-length proteins. Component of cytoplasmic complexes, which also contain PXN, ARHGEF6 and GIT1. Interacts with ARHGEF7. Also interacts with CRIPAK. Interacts with NISCH.,

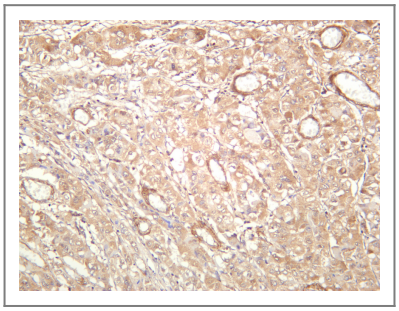
Validation Data



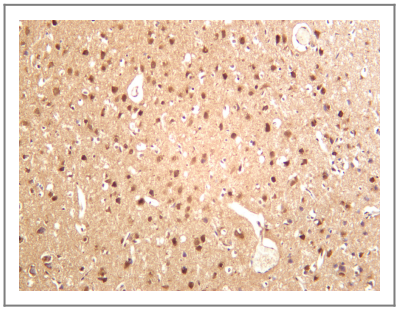
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PAK1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: C6 Lane 3: Jurkat Lane 4: U-14 Predicted band size: 61kDa Observed band size: 61kDa



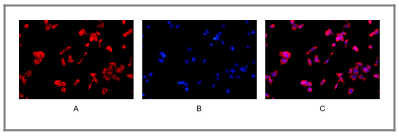
Human brain was stained with anti-PAK1 rabbit antibody



Human hepatocellular carcinoma was stained with anti-PAK1 rabbit antibody



Rat brain was stained with anti-PAK1 rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: PAK1 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

Contact information

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Please scan the QR code to access additional product information:
PAK1 (PT0342R) PT® Rabbit mAb