Anti-Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014212

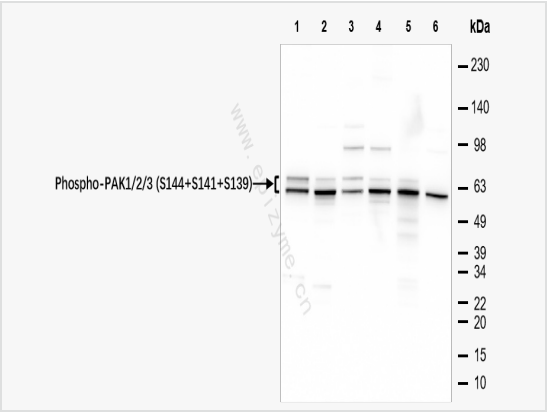
Product Information

Application	IHC-P/IF (Tissue-P), IF (Cell)/ICC, WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:3,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	51K37R33
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Phospho-PAK1/2/3 (S144+S141+S139)
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Rabbit mAb [51K37R33] is for research use only and not for use in diagnostic or therapeutic procedures.

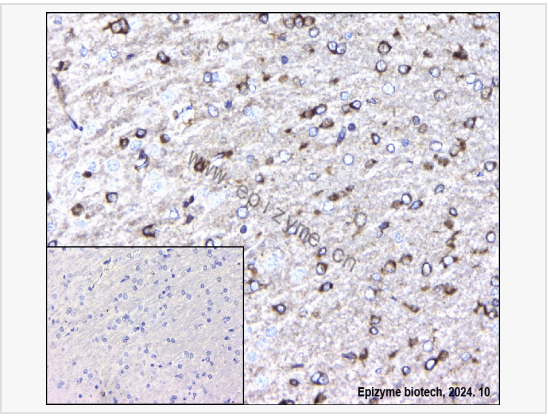
Protein Information

Synonyms	PAK1 (phospho S144) + PAK2 (phospho S141) + PAK3 (phospho S139), ADRB2, Alpha-PAK, CDC42/RAC effector kinase PAK-A, EC 2.7.11.1, P65-PAK, P68-PAK, PAK1 (phospho S144), PAK2 (phospho S141), PAK3 (phospho S139), PAK1 (phospho S144), PAK2 (phospho S141), PAK3 (phospho S139), PAK1, PAK2, PAK3, PAK-1, PAK-2, PAK-3.
Calculated MW	Calculated MW: 58-62 kDa; Observed MW: 58-62 kDa
Uniprot ID	O75914, Q13153, Q13177
Gene ID	5063, 5058, 5062
Background	PAK proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nuclear signaling. PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4.
Cellular Location	PAK1: Cytoplasm. Cell junction > focal adhesion. Recruited to focal adhesions upon activation. PAK2: Cytoplasm and Nucleus. Cytoplasm > perinuclear region. Membrane. Interaction with ARHGAP10 probably changes PAK-2p34 location to cytoplasmic perinuclear region. Myristoylation changes PAK-2p34 location to the membrane. PAK3: Cytoplasmic

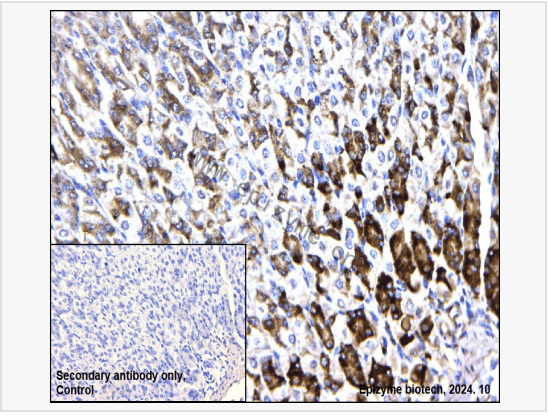
Validation Images



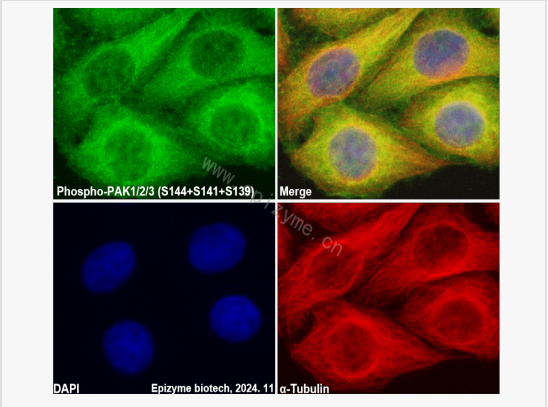
Western Blot - Anti-Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Rabbit mAb [51K37R33]
All lanes: R014212 at 1:3,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 3: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 6: Rat heart whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 58-62 kDa
Observed band size: 58-62 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Rabbit mAb [51K37R33]
Sample: Paraformaldehyde-fixed, paraffin embedded rat brain tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014212 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Rabbit mAb [51K37R33]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse stomach tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014212 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-Phospho-PAK1/2/3 (Ser144+Ser141+Ser139) Rabbit mAb [51K37R33]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014212 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).