Anti-Phospho-PKC alpha (Thr638) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R012646

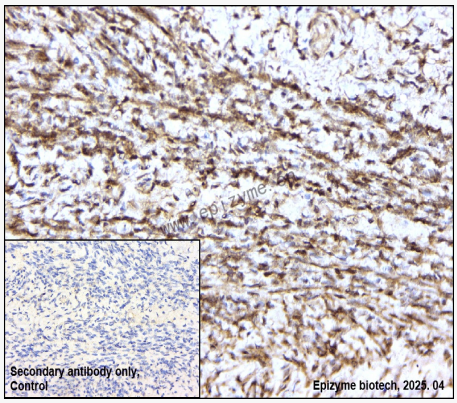
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	35M52M62
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Thr638 of human PKC alpha
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-PKC alpha (Thr638) Rabbit mAb [35M52M62] is for research use only and not for use in diagnostic or therapeutic procedures.

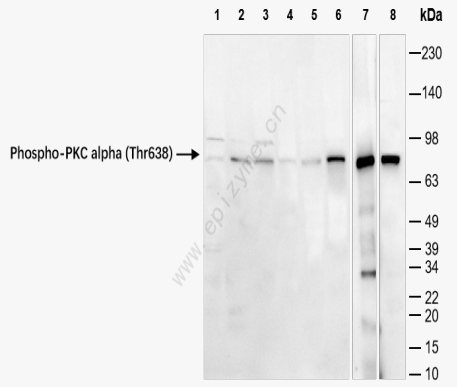
Protein Information

Synonyms	AAG6; Aging associated gene 6; aPKC; KPCA_HUMAN; PKC alpha; PKC-A; PKC-alpha; PKCA; PRKACA; PRKCA; Protein Kinase C alpha; Protein kinase C alpha type.
Calculated MW	Calculated MW: 77 kDa; Observed MW: 80 kDa
Uniprot ID	P17252
Gene ID	5578
Background	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle checkpoint, and cell volume control. Knockout studies in mice suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes. [provided by RefSeq, Jul 2008]
Cellular Location	Cytoplasm. Cell membrane. Nucleus.

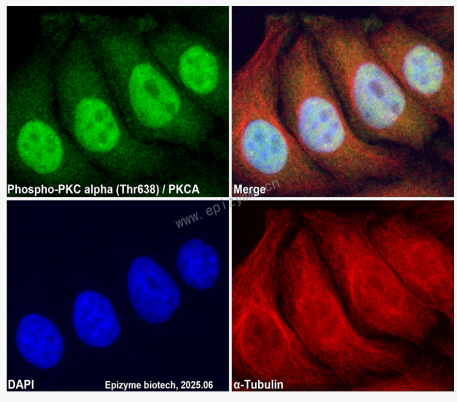
Validation Images



Immunohistochemistry - Anti-Phospho-PKC alpha (Thr638) Rabbit mAb [35M52M62]
Sample: Paraformaldehyde-fixed, paraffin embedded human endometrial carcinoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R012646 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,001 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.



Western Blot - Anti-Phospho-PKC alpha (Thr638) Rabbit mAb [35M52M62]
All lanes: R012646 at 1:2,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: Huh1 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 4: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 5: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates
Lane 6: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates
Lane 7: Mouse brain whole tissue lysates
Lane 8: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell 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: 77 kDa
Observed band size: 80 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Phospho-PKC alpha (Thr638) Rabbit mAb [35M52M62]
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: R012646 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).