Anti-cAMP Protein Kinase Catalytic Subunit Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R011347

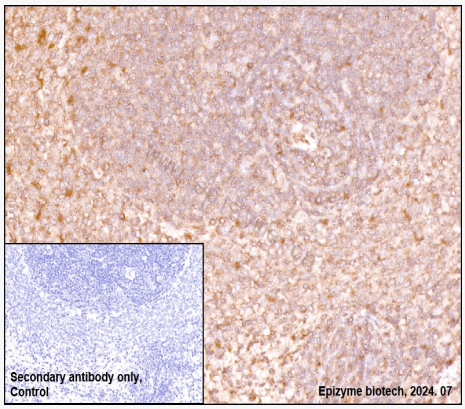
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:5,000; IHC-P 1:200; IF 1:100
Host	Rabbit
Clonality	Monoclonal
Clone No.	66L59L61
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human cAMP Protein Kinase Catalytic subunit
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℃. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20℃ storage.
Precautions	Anti-cAMP Protein Kinase Catalytic Subunit Rabbit mAb [66L59L61] is for research use only and not for use in diagnostic or therapeutic procedures.

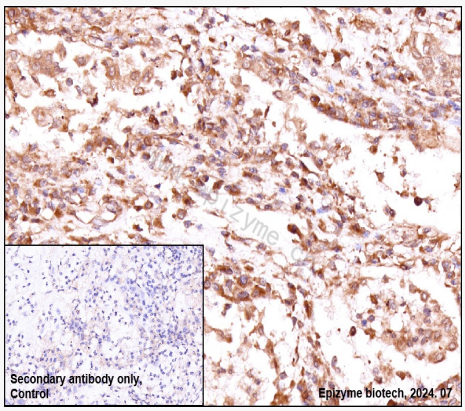
Protein Information

Synonyms	cAMP dependent protein kinase alpha catalytic subunit, cAMP dependent protein kinase catalytic subunit alpha, cAMP dependent protein kinase catalytic subunit alpha, isoform 1, cAMP-dependent protein kinase catalytic subunit alpha, KAPCA_HUMAN, PKA C alpha, PKA C-alpha, PKACA, PPNAD4, PRKACA, PRKACAA, Protein kinase A catalytic subunit alpha, Protein kinase A catalytic subunit.
Calculated MW	Calculated MW: 41 kDa; Observed MW: 41 kDa
Uniprot ID	P17612
Gene ID	5566
Background	Phosphorylates a large number of substrates in the cytoplasm and the nucleus. Regulates the abundance of compartmentalized pools of its regulatory subunits through phosphorylation of PJA2 which binds and ubiquitinates these subunits, leading to their subsequent proteolysis. Phosphorylates CDC25B, ABL1, NFKB1, CLDN3, PSMC5/RPT6, PJA2, RYR2, RORA and VASP. RORA is activated by phosphorylation. Required for glucose-mediated adipogenic differentiation increase and osteogenic differentiation inhibition from osteoblasts. Involved in the regulation of platelets in response to thrombin and collagen; maintains circulating platelets in a resting state by phosphorylating proteins in numerous platelet inhibitory pathways when in complex with NF-kappa-B

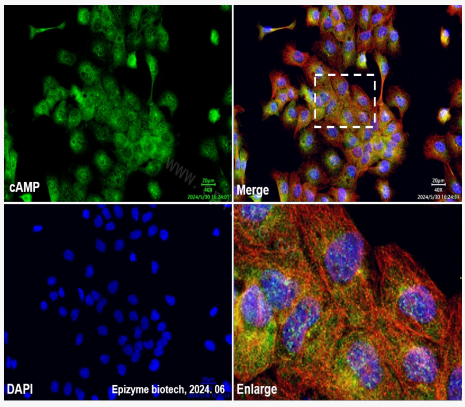
Validation Images



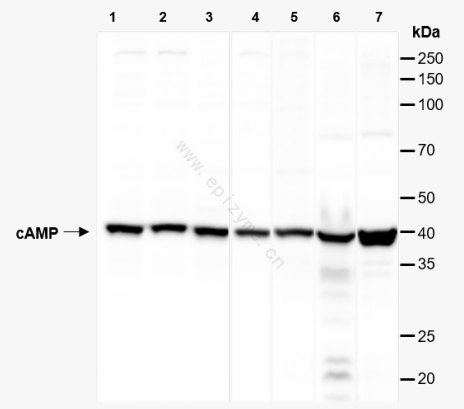
Immunohistochemistry - Anti-cAMP Protein Kinase Catalytic Subunit Rabbit mAb [66L59L61]
Sample: Paraformaldehyde-fixed, paraffin embedded rat spleen tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R011347 at 1:200 dilution
Secondary antibody: Goat 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-cAMP Protein Kinase Catalytic Subunit Rabbit mAb [66L59L61]
Sample: Paraformaldehyde-fixed, paraffin embedded human lung cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R011347 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-cAMP Protein Kinase Catalytic Subunit Rabbit mAb [66L59L61]
Sample: A431 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: R011347 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).



Western Blot - Anti-cAMP Protein Kinase Catalytic Subunit Rabbit mAb [66L59L61]
All lanes: R011347 at 1:5,000 dilution
Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysates
Lane 3: Jurkat (human T lymphocytic leukemia cell) whole cell lysates
Lane 4: T24 (human bladder cancer epithelial cell) whole cell lysates
Lane 5: SW620 (human colorectal carcinoma epithelial cell) whole cell lysates
Lane 6: Rat kidney whole tissue lysates
Lane 7: Balb/c mouse brain 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: 41 kDa
Observed band size: 41 kDa
Developed using the ECL technique (Cat. No. SQ201).