Anti-Phospho-PKA alpha/beta/gamma (catalytic subunit) (Thr197) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R015300

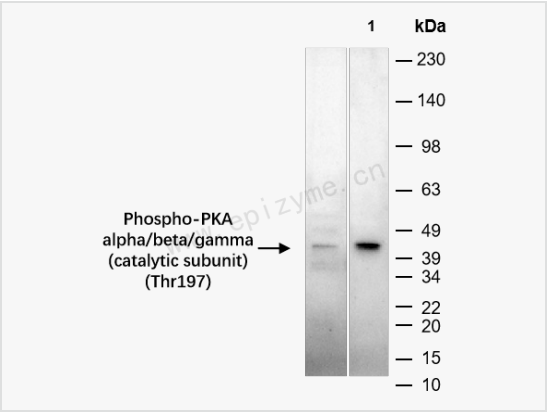
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	66S25I17
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Tyr197 of human PKA alpha/beta/gamma (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°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-PKA alpha/beta/gamma (catalytic subunit) (Thr197) Rabbit mAb [66S25I17] is for research use only and not for use in diagnostic or therapeutic procedures.

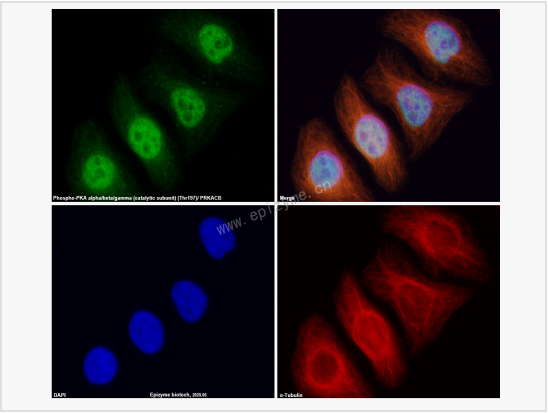
Protein Information

Synonyms	cAMP dependent protein kinase catalytic subunit alpha; cAMP dependent protein kinase catalytic subunit beta; cAMP dependent protein kinase catalytic subunit gamma; PKA C alpha; PKA C beta; PKA C gamma; PKACA; PRKACA; PRKACB; PRKACG.
Calculated MW	Calculated MW: 41 kDa; Observed MW: 41 kDa
Uniprot ID	P17612
Gene ID	5566
Background	This gene encodes one of the catalytic subunits of protein kinase A, which exists as a tetrameric holoenzyme with two regulatory subunits and two catalytic subunits, in its inactive form. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. cAMP-dependent phosphorylation of proteins by protein kinase A is important to many cellular processes, including differentiation, proliferation, and apoptosis. Constitutive activation of this gene caused either by somatic mutations, or genomic duplications of regions that include this gene, have been associated with hyperplasias and adenomas of the adrenal cortex and are linked to corticotropin-independent Cushing's syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. Tissue-specific isoforms that differ at the N-terminus have been described, and these isoforms may differ in the post-translational modifications that occur at the N-terminus of some isoforms. [provided by RefSeq, Jan 2015]

Validation Images



Western Blot - Anti-Phospho-PKA alpha/beta/gamma (catalytic subunit) (Thr197) Rabbit mAb [66S25I17]
All lanes: R015300 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: Rat 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).



Immunofluorescence - Anti-Phospho-PKA alpha/beta/gamma (catalytic subunit) (Thr197) Rabbit mAb [66S25I17]
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: R015300 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).