

A18603

Leader in Biomolecular Solutions for Life Science



[KO Validated] PKA C-alpha (PRKACA) Mouse mAb

Catalog No.: A18603

KO Validated

2 Publications

Basic Information

Observed MW

40kDa

Calculated MW

41kDa

Category

Monoclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat

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.

Recommended Dilutions

WB 1:10000 - 1:40000

IF/ICC 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

5566

Swiss Prot

P17612

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

CAFD1; PKACA; PPNAD4; A)

Contact

 www.abclonal.com

Product Information

Source

Mouse

Isotype

IgG2B,Kappa

Purification

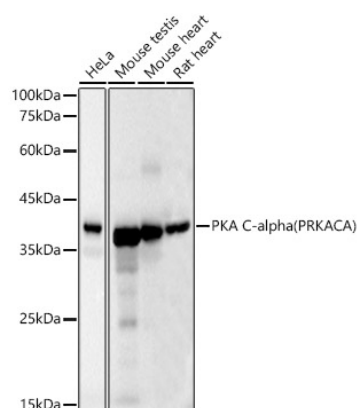
Affinity purification

Storage

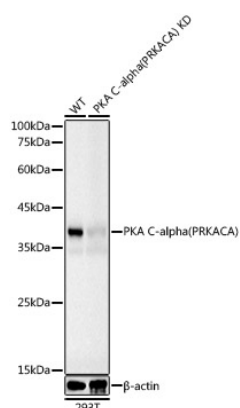
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

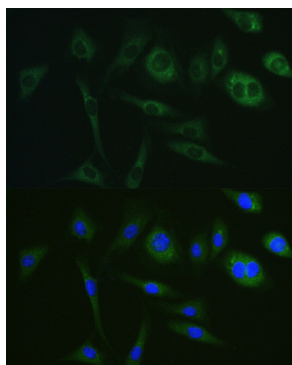
Validation Data



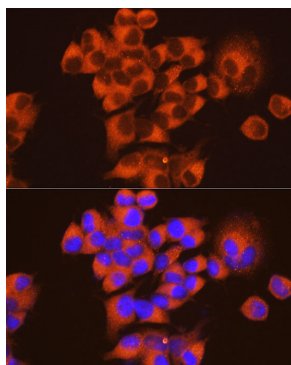
Western blot analysis of various lysates, using [KO Validated] PKA C-alpha (PRKACA) Mouse mAb (A18603) at 1:10000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 20s.



Western blot analysis of lysates from wild type (WT) and PKA C-alpha (PRKACA) knockdown (KD) 293T cells, using [KO Validated] PKA C-alpha (PRKACA) Mouse mAb (A18603) at 1:10000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 20s.



Immunofluorescence analysis of BALB-3T3 cells using [KD Validated] PKA C-alpha (PRKACA) Mouse mAb (A18603) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of MCF7 cells using [KD Validated] PKA C-alpha (PRKACA) Mouse mAb (A18603) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.