

# [KD Validated] PKA C-alpha Rabbit mAb

Catalog No.: A28372 **Recombinant**

## Basic Information

### Observed MW

41 kDa/42 kDa

### Calculated MW

41 kDa/40 kDa

### Category

Primary antibody

### Applications

WB,IP,IF/ICC,IHC-P,ELISA

### Cross-Reactivity

Human, Mouse, Rat

### CloneNo number

ARC77658

## 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** 1:24000 - 1:80000

**IP** 0.5µg-4µg antibody for  
200µg-400µg extracts of  
whole cells

**IF/ICC** 1:200 - 1:300

**IHC-P** 1:500 - 1:2000

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ( $\geq 1:10000$ ) a sequential dilution method is strongly recommended to ensure measurement accuracy.

## 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

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

### Storage

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

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

## Contact

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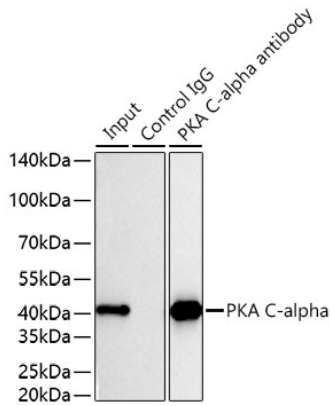
 | 400-999-6126

 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

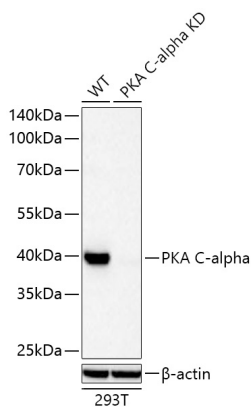
 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

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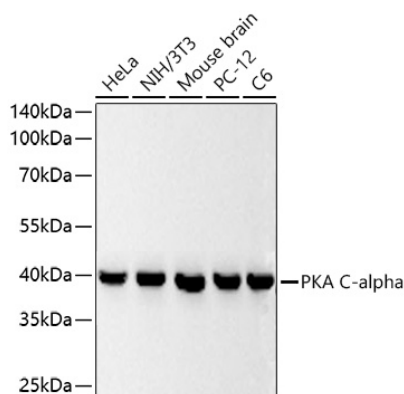
## Validation Data



Immunoprecipitation of PKA C-alpha from 300 µg extracts of 293T cells was performed using 2 µg of [KD Validated] PKA C-alpha Rabbit mAb (A28372). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using [KD Validated] PKA C-alpha Rabbit mAb (A28372) at a dilution of 1:5000.

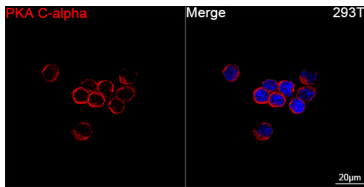


Western blot analysis of lysates from wild type (WT) and PKA C-alpha knockdown (KD) 293T cells using [KD Validated] PKA C-alpha Rabbit mAb (A28372) at 1:40000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90 s.

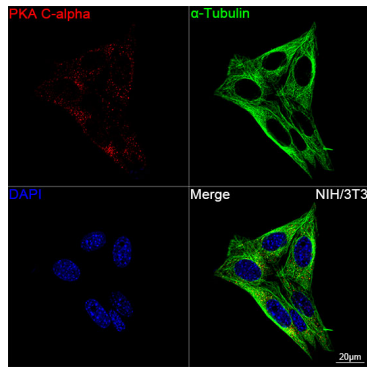


Western blot analysis of various lysates using [KD Validated] PKA C-alpha Rabbit mAb (A28372) at 1:40000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90 s.

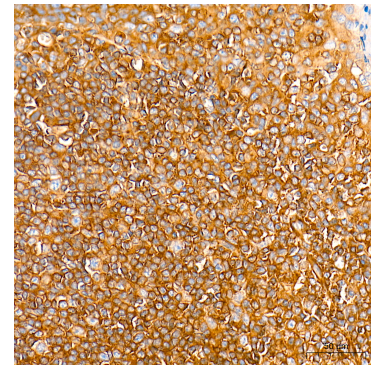
## Validation Data



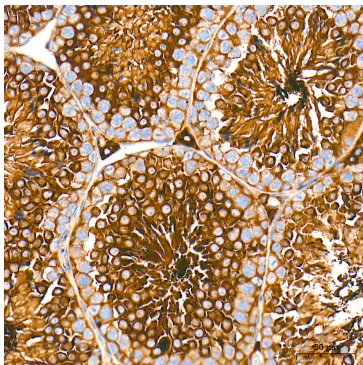
Confocal imaging of 293T cells using [KD Validated] PKA C-alpha Rabbit mAb (A28372, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



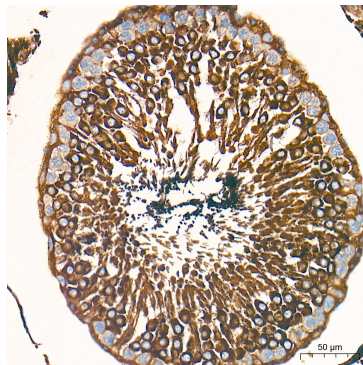
Confocal imaging of NIH/3T3 cells using [KD Validated] PKA C-alpha Rabbit mAb (A28372, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using [KD Validated] PKA C-alpha Rabbit mAb (A28372) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using [KD Validated] PKA C-alpha Rabbit mAb (A28372) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat testis tissue using [KD Validated] PKA C-alpha Rabbit mAb (A28372) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.