**Product Datasheet**

# PKA C alpha Antibody

Catalog No: #48515

Package Size: #48515-1 50ul #48515-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

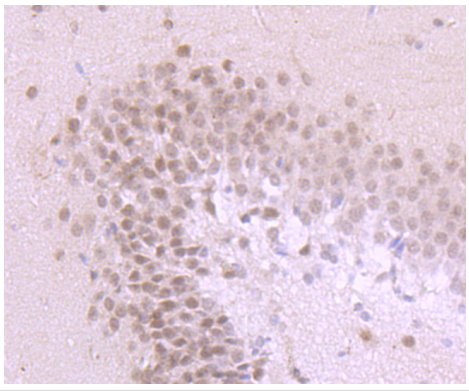
## Description

| | |
|---|---|
| Product Name | PKA C alpha Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Protein affinity purified |
| Applications | ICC,IHC,FC |
| Species Reactivity | Hu, Ms, Rt |
| Immunogen Description | Recombinant protein. |
| Other Names | cAMP dependent protein kinase beta catalytic subunit antibody cAMP dependent protein kinase alpha catalytic subunit antibody cAMP dependent protein kinase catalytic subunit alpha antibody cAMP dependent protein kinase catalytic subunit beta antibody PKA C alpha antibody PKA C beta antibody PKACA antibody PKACB antibody PRKACA antibody PRKACB antibody Protein kinase cAMP dependent catalytic alpha antibody Protein kinase cAMP dependent catalytic beta antibody |
| Accession No. | Swiss-Prot#:P17612 |
| Uniprot | P17612 |
| GeneID | 5566; |
| Calculated MW | 40 kDa |
| Formulation | 1*TBS (pH7.4), 0.5%BSA, 50%Glycerol. Preservative: 0.05% Sodium Azide. |
| Storage | Store at -20°C |

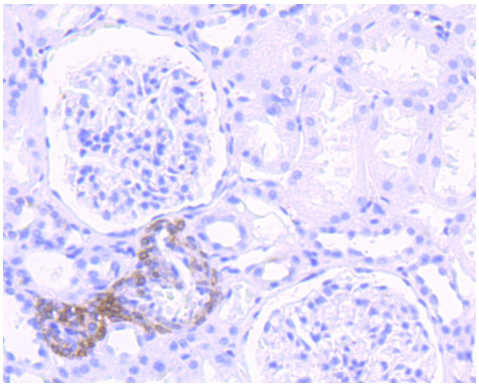
## Application Details

IHC: 1:50-1:200 ICC: 1:50-1:200 FC: 1:50-1:100

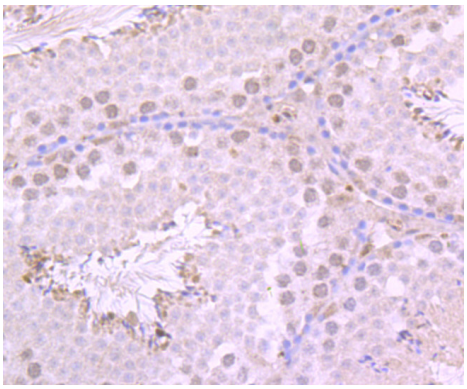
## Images



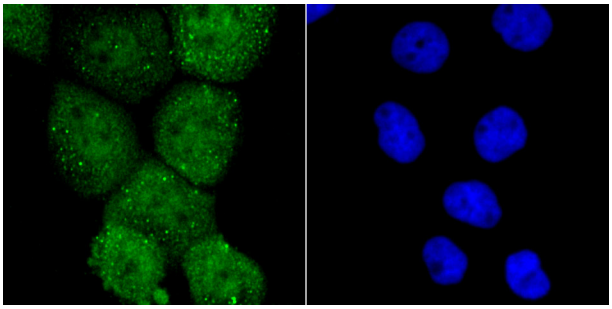
Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-PKA C-alpha antibody. Counter stained with hematoxylin.



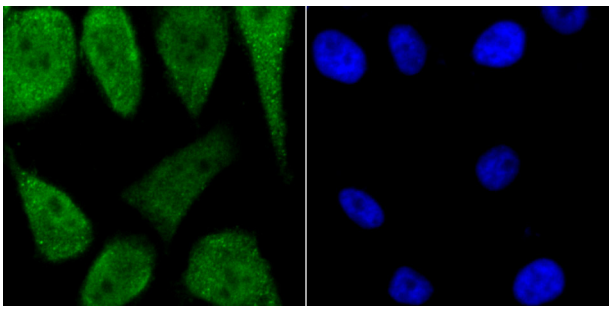
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-PKA C-alpha antibody. Counter stained with hematoxylin.



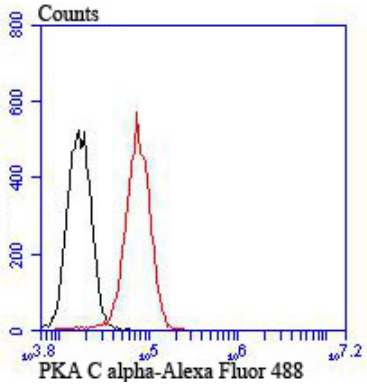
Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-PKA C-alpha antibody. Counter stained with hematoxylin.



ICC staining PKA C-alpha in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining PKA C-alpha in PC-3M cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.




Flow cytometric analysis of PC-3M cells with PKA C-alpha antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

## Background

The second messenger cyclic AMP (cAMP) mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme resulting in release of active catalytic subunits. Three catalytic (C) subunits have been identified, designated Cα, Cβ and Cγ, that each represent specific gene products. Cα and Cβ are closely related (93% amino acid sequence similarity), whereas Cγ displays 83% and 79% similarity to Cα and Cβ, respectively. Activation of transcription upon elevation of cAMP levels results from translocation of PKA to the nucleus where it phosphorylates the transcription factor cAMP response element binding protein (CREB) on serine 133 which in turn leads to TFIIB binding to TATA-box-binding protein TBP1, thus linking phospho-CREB to the pol II transcription initiation complex.

## References

Note: This product is for in vitro research use only