



# PKA $\alpha$ / $\beta$ / $\gamma$ cat (phospho Thr197) rabbit pAb

Cat No.:ES6740

For research use only

## Overview

|                                 |   |
|---------------------------------|---|
| <b>Product Name</b>             | PKA $\alpha$ / $\beta$ / $\gamma$ cat (phospho Thr197) rabbit pAb   |
| <b>Host species</b>             | Rabbit  |
| <b>Applications</b>             | WB;IHC;IF;ELISA   |
| <b>Species Cross-Reactivity</b> | Human;Mouse;Rat   |
| <b>Recommended dilutions</b>    | Western Blot: 1/500 - 1/2000.<br>Immunohistochemistry: 1/100 - 1/300.<br>Immunofluorescence: 1/200 - 1/1000. ELISA:<br>1/10000. Not yet tested in other applications.   |
| <b>Immunogen</b>                | The antiserum was produced against synthesized peptide derived from human PKA CAT around the phosphorylation site of Thr197. AA range:166-215   |
| <b>Specificity</b>              | Phospho-PKA $\alpha$ / $\beta$ / $\gamma$ cat (T198) Polyclonal Antibody detects endogenous levels of PKA $\alpha$ / $\beta$ / $\gamma$ cat protein only when phosphorylated at T198.   |
| <b>Formulation</b>              | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Storage</b>                  | Store at -20°C. Avoid repeated freeze-thaw cycles.  |
| <b>Protein Name</b>             | cAMP-dependent protein kinase catalytic subunit alpha/beta  |
| <b>Gene Name</b>                | PRKACA/PRKACB   |
| <b>Cellular localization</b>    | Cytoplasm. Cell membrane. Nucleus . Mitochondrion . Membrane ; Lipid-anchor . Translocates into the nucleus (monomeric catalytic subunit). The inactive holoenzyme is found in the cytoplasm. Distributed throughout the cytoplasm in meiotically incompetent oocytes. Associated to mitochondrion as meiotic competence is acquired. Aggregates around the germinal vesicles (GV) at the immature GV stage oocytes (By similarity). Colocalizes with HSF1 in nuclear stress bodies (nSBs) upon heat shock (PubMed:21085490). . ; [Isoform 2]: Cell projection, cilium, flagellum . Cytoplasmic vesicle, secretory vesicle, acrosome . Expressed in |





**Purification**

the midpiece region of the sperm flagellum (PubMed:10906071). Colocalizes with MROH2B and TCP11 on the acrosome and tail regions in round spermatids and spermatozoa regardle  
The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Clonality**

Polyclonal

**Concentration**

1 mg/ml

**Observed band**

40kD

**Human Gene ID**

5566/5567

**Human Swiss-Prot Number**

P17612/P22694/P22612

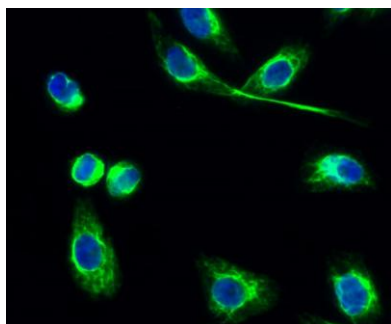
**Alternative Names**

PRKACA; PKACA; cAMP-dependent protein kinase catalytic subunit alpha; PKA C-alpha; PRKACB; cAMP-dependent protein kinase catalytic subunit beta; PKA C-beta; PRKACG; cAMP-dependent protein kinase catalytic subunit gamma; PKA C-gamma

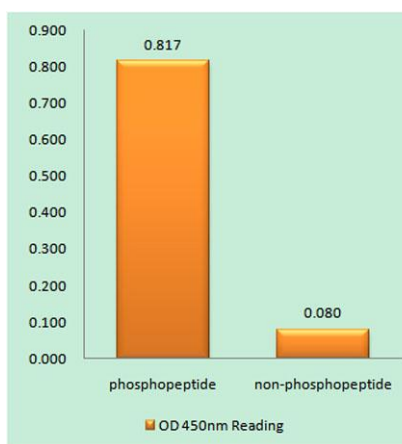
**Background**

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.  
Altern

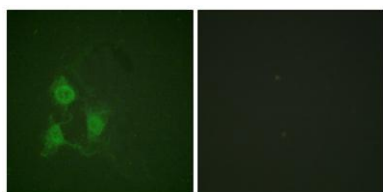




Immunofluorescence analysis of HeLa cell. 1,PKA $\alpha/\beta/\gamma$  cat (phospho Thr198) Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKA CAT (Phospho-Thr197) Antibody



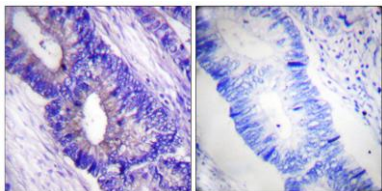
Immunofluorescence analysis of A549 cells, using PKA CAT (Phospho-Thr197) Antibody. The picture on the right is blocked with the phospho peptide.





**ELK Biotechnology**

Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using PKA CAT (Phospho-Thr197) Antibody. The picture on the right is blocked with the phospho peptide.



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