

Datasheet for ABIN302080  
**anti-PRKACA antibody**



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1 Image

## Overview

Quantity:	0.1 mg
Target:	PRKACA
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PRKACA antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Immunogen:	Peptide corresponding to amino acids ESPAQNTAHL DQFERIK of human protein kinase A $\alpha$ (PKA $\alpha$ ).
Clone:	6D2-1
Isotype:	IgG1
Specificity:	The mouse monoclonal antibody 6D2.1 strongly reacts with human protein kinase A (an intracellular antigen) catalytic (PKA) $\alpha$ subunit, and weakly with PKA $\gamma$ subunit (both around 40 kDa). The recognized epitope of PKA $\alpha$ is identical between man, sheep, pig, ox and dog.
Cross-Reactivity (Details):	Human, Other not determined
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)

## Target Details

Target:	PRKACA
Alternative Name:	PKAc ( <a href="#">PRKACA Products</a> )
Background:	Protein kinase cAMP-activated catalytic subunit $\alpha$ , Protein kinase A (PKA, cAMP-dependent protein kinase) is a key element of a ubiquitous signaling pathway important in the cell cycle, cellular communication, memory formation and behavior. PKA is composed of two catalytic (PKAc, protein kinase A catalytic subunit) and two regulatory subunits (PKAr). Upon binding cAMP, the complex dissociates to PKAr dimer and two activated PKAc ser/thr protein kinase catalytic monomers. The released PKAc can translocate into the nucleus and exert a regulatory role in the activation of multiple nuclear hormone receptors. However, PKAc-mediated activation of tonicity-dependent gene expression is cAMP independent. Humans express three types of PKAc subunit – , PKAc $\alpha$ is present in most human tissues, PKAc $\beta$ and $\gamma$ are tissue-specific, the latter is found in testes. PKACA, PPNAD4, PRKACA, Protein kinase Ac
Gene ID:	5566
UniProt:	<a href="#">P17612</a>
Pathways:	<a href="#">NF-kappaB Signaling</a> , <a href="#">Hedgehog Signaling</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Thyroid Hormone Synthesis</a> , <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Myometrial Relaxation and Contraction</a> , <a href="#">M Phase</a> , <a href="#">G-protein mediated Events</a> , <a href="#">Signaling Events mediated by VEGFR1 and VEGFR2</a> , <a href="#">Interaction of EGFR with phospholipase C-gamma</a> , <a href="#">Thromboxane A2 Receptor Signaling</a> , <a href="#">VEGFR1 Specific Signals</a> , <a href="#">Lipid Metabolism</a> , <a href="#">SARS-CoV-2 Protein Interactome</a> , <a href="#">The Global Phosphorylation Landscape of SARS-CoV-2 Infection</a>

## Application Details

Application Notes:	Western blotting: Recommended dilution: 1 $\mu$ g/mL, positive control: HeLa human cervix carcinoma cell line. To detect PKAc $\gamma$ , use a more concentrated lysate from a tissue expressing this subunit (testis).
Restrictions:	For Research Use only

## Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

## Handling

should be handled by trained staff only.

Handling Advice:	<b>Do not freeze.</b>
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

## Images

### Dot Blot

**Image 1.** Dot Blot analysis of GST and GST-fusion proteins using anti-PKAc (6D2.1) and anti-GST (S-tag-05

