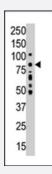


# PRKCA polyclonal antibody

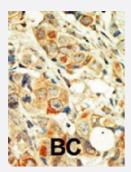
Catalog # PAB4531 Size 400 uL

# **Applications**



### Western Blot (Tissue lysate)

Western blot analysis of PRKCA polyclonal antibody (Cat # PAB4531) in placenta lysate . PRKCA (arrow) was detected using purified PRKCA polyclonal antibody (Cat # PAB4531) . Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence .



# Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with PRKCA polyclonal antibody (Cat # PAB4531), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PRKCA.
lmmunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human PRKCA.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification



## **Product Information**

Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

## **Applications**

Western Blot (Tissue lysate)

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Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKCA	
Entrez GeneID	<u>5578</u>
Protein Accession#	<u>P17252</u>
Gene Name	PRKCA
Gene Alias	AAG6, MGC129900, MGC129901, PKC-alpha, PKCA, PRKACA
Gene Description	protein kinase C, alpha
Omim ID	<u>176960</u>
Gene Ontology	<u>Hyperlink</u>



#### **Product Information**

#### **Gene Summary**

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be a ctivated by calcium and the second messenger diacylglycerol. PKC family members phosphorylat e a wide variety of protein targets and are known to be involved in diverse cellular signaling pathw ays. PKC family members also serve as major receptors for phorbol esters, a class of tumor pro moters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This k inase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle checkpoint, and cell volume control. Knockout studies in mice sugge st that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes. [provided by RefSeq

**Other Designations** 

aging-associated gene 6|protein kinase C alpha type

#### **Publication Reference**

Protein kinase C-alpha phosphorylation of specific serines in the connecting segment of the beta 4 integrin
regulates the dynamics of type II hemidesmosomes.

Rabinovitz I, Tsomo L, Mercurio AM.

Molecular and Cellular Biochemistry 2004 May; 24(10):4351.

<u>Lactosylceramide recruits PKCalpha/epsilon and phospholipase A2 to stimulate PECAM-1 expression in human monocytes and adhesion to endothelial cells.</u>

Gong N, Wei H, Chowdhury SH, Chatterjee S.

PNAS 2004 Apr; 101(17):6490.

Application: WB, Human, U-937 cells

Cell volume regulation in response to hypotonicity is impaired in HeLa cells expressing a protein kinase
 Calpha mutant lacking kinase activity.

Hermoso M, Olivero P, Torres R, Riveros A, Quest AF, Stutzin A.

The Journal of Biological Chemistry 2004 Feb; 279(17):17681.

## **Pathway**

- Calcium signaling pathway
- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Fc gamma R-mediated phagocytosis
- Focal adhesion



- Gap junction
- Glioma
- GnRH signaling pathway
- <u>Leukocyte transendothelial migration</u>
- Long-term depression
- Long-term potentiation
- MAPK signaling pathway
- Melanogenesis
- Natural killer cell mediated cytotoxicity
- Non-small cell lung cancer
- Pathogenic Escherichia coli infection EHEC
- Pathways in cancer
- Phosphatidylinositol signaling system
- Tight junction
- Vascular smooth muscle contraction
- VEGF signaling pathway
- Vibrio cholerae infection
- Wnt signaling pathway

#### Disease

- Adenocarcinoma
- Asthma
- Breast cancer
- Breast Neoplasms
- Esophageal Neoplasms
- Genetic Predisposition to Disease



- Liver Cirrhosis
- Mental Disorders
- Multiple Sclerosis
- Obesity
- Pancreatic Neoplasms
- Premature Birth
- Schizophrenia
- Tobacco Use Disorder
- Vaginosis