

# PRKCA (phospho S657/Y658) polyclonal antibody

Catalog # PAB7910 Size 100 uL

### **Applications**



### **Immunoprecipitation**

Western blot analysis of immunoprecipitates from neonatal rat brain lysate using anti-PRKCA antibody. Control (lane 1) and alkaline phosphatase treated (lane 2) precipitates were probed with PRKCA (phospho S657/Y658) polyclonal antibody (Cat # PAB7910). The latter shows no detection of PRKCA after phosphatase treatment.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of PRKCA.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding S657/Y658 of human PRKCA.
Host	Rabbit
Reactivity	Human, Rabbit, Rat
Specificity	This sequence is similar to a dual phosphorylation site found in PKCbl (Ser-661/Tyr-662). These hum an sequences are highly conserved in rat and mouse PKCa and PKCbl. In addition,
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:2000) Immunoprecipitation (5-10 ul) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol, 1 mg/mL BSA, 0.05% sodium azide)



#### **Product Information**

Storage Instruction	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
- Immunoprecipitation

Western blot analysis of immunoprecipitates from neonatal rat brain lysate using anti-PRKCA antibody. Control (lane 1) and alkaline phosphatase treated (lane 2) precipitates were probed with PRKCA (phospho S657/Y658) polyclonal antibody (Cat # PAB7910). The latter shows no detection of PRKCA after phosphatase treatment.

Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKCA	
Entrez GeneID	<u>5578</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>
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**

A Ras activation pathway dependent on Syk phosphorylation of protein kinase C.

Kawakami Y, Kitaura J, Yao L, McHenry RW, Kawakami Y, Newton AC, Kang S, Kato RM, Leitges M, Rawlings DJ, Kawakami T.

PNAS 2003 Aug; 100(16):9470.

The molecular heterogeneity of protein kinase C and its implications for cellular regulation.

Nishizuka Y.

Nature 1988 Aug; 334(6184):661.

Application: IF, IHC, Rat, Rat cerebellar cortex

# 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