



## Human Protein Kinase C Alpha (DAG261)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

Product Overview	Recombinant Human Protein Kinase C (PKC) Alpha. Not enzymatically active.
Antigen Description	Protein kinase C alpha (PKC $\alpha$ ), also known as PRKCA, refers to both a human gene and the protein that is encoded by it. Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. 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 kinase 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 suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca <sup>2+</sup> handling in myocytes.
Species	Human
Conjugate	Unconjugated
Applications	Suitable for use as a standard in Western blot using enhanced chemiluminescence. Load 2-5 $\mu$ l directly from vial (no dilution necessary). For blots using less sensitive substrates, such as alkaline phosphatase, larger amount of protein should be loaded onto the
Format	Purified, Liquid
Concentration	20 $\mu$ g/ml
Buffer	Suspended in SDS/mercaptoethanol sample buffer with a bromophenol blue dye marker.
Preservative	None
Storage	2-8°C short term, -20°C long term

## BACKGROUND

### Introduction

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. 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 kinase 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 suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes. [provided by RefSeq, Jul 2008]

### Keywords

PRKCA; protein kinase C, alpha; AAG6; PKCA; PRKACA; PKC-alpha; protein kinase C alpha type; PKC-A; aging-associated gene 6;