# abcam

## Product datasheet

# Recombinant human PKC iota protein ab60850

#### 6 图像

#### 描述

产品名称 重组人PKC iota蛋白

纯**度** > 90 % Densitometry.

Affinity purified.

表达系统 Baculovirus infected Sf9 cells

**蛋白长度** Full length protein

无动**物成分** No

性质 Recombinant

种属 Human

### 技术指标

Our **Abpromise guarantee** covers the use of **ab60850** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应**用** Functional Studies

SDS-PAGE Western blot

形式 Liquid

补充说明 <u>ab204856</u> (CREB peptide) can be utilized as a substrate for assessing kinase activity

#### 制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292%

EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 常规信息

功能

Calcium-independent, phospholipid-dependent, serine- and threonine-specific kinase. May play a

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role in the secretory response to nutrients. Involved in cell polarization processes and the formation of epithelial tight junctions. Implicated in the activation of several signaling pathways including Ras, c-Src and NF-kappa-B pathways. Functions in both pro- and anti-apoptotic pathways. Functions in the RAC1/ERK signaling required for transformed growth. Plays a role in microtubule dynamics through interaction with RAB2A and GAPDH and recruitment to vesicular tubular clusters (VTCs).

组织特异性

Predominantly expressed in lung and brain, but also expressed at lower levels in many tissues including pancreatic islets. Highly expressed in non-small cell lung cancers.

序列相似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.

Contains 1 AGC-kinase C-terminal domain.

Contains 1 OPR domain.

Contains 1 phorbol-ester/DAG-type zinc finger.

Contains 1 protein kinase domain.

结构域

The OPR domain mediates interaction with SQSTM1. The C1 domain does not bind diacylglycerol (DAG).

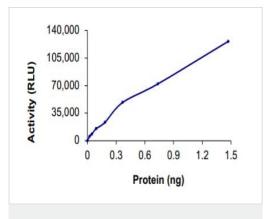
翻译后修饰

On neuronal growth factor (NGF) stimulation, phosphorylated by Src on Tyr-265, Tyr-280 and Tyr-334. Phosphorylation on Tyr-265 facilitates binding to KPNB1/importin-beta regulating entry of PRKCI into the nucleus. Phosphorylation on Tyr-334 is important for NF-kappa-B stimulation.

细胞定位

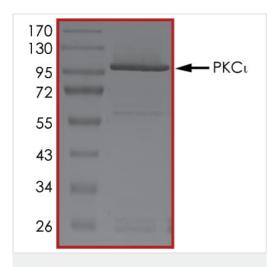
Cytoplasm. Membrane. Endosome. Nucleus. Transported into the endosome through interaction with SQSTM1/p62. After phosphorylation by cSrc, transported into the nucleus through interaction with KPNB1. Colocalizes with CDK7 in the cytoplasm and nucleus. Vesicular tubular clusters. Transported to VTCs through interaction with RAB2A.

#### 图片



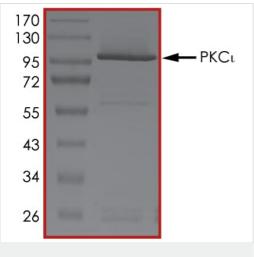
Functional Studies - Recombinant human PKC iota protein (ab60850)

The specific activity of PKC iota (ab60850) was determined to be 572 nmol/min/mg as per activity assay protocol and was equivalent to 564 nmol/min/mg as per radiometric assay



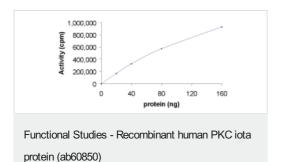
SDS PAGE analysis of ab60850

SDS-PAGE - Recombinant human PKC iota protein (ab60850)

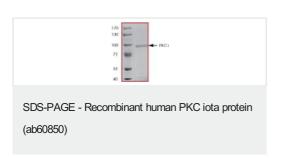


SDS-PAGE - Recombinant human PKC iota protein (ab60850)

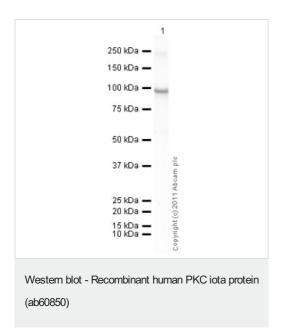
SDS PAGE analysis of ab60850



Sample Kinase Activity Plot.



ab60850 on SDS-PAGE, MW ~98 kDa.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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