

## Product datasheet

# Recombinant Human PKC iota protein ab159205

1 Image

### Overview

---

**Product name** Recombinant Human PKC iota protein

**Protein length** Protein fragment

### Description

---

**Nature** Recombinant

**Source** Wheat germ

### Amino Acid Sequence

**Species** Human

**Sequence** MSHTVAGGGSGDHSQVRVKAYYRGDIMITHFEPSSIFEGLCNEVRDMCS  
FDNEQLFTMKWIDEEGDPCTVSSQLELEEAFLYELNKDSELLIHVFPCV

**Amino acids** 1 to 100

**Tags** proprietary tag N-Terminus

### Specifications

---

Our [Abpromise guarantee](#) covers the use of **ab159205** in the following tested applications.

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

**Applications** Western blot

ELISA

**Form** Liquid

**Additional notes** Protein concentration is above or equal to 0.05 mg/ml.

### Preparation and Storage

---

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

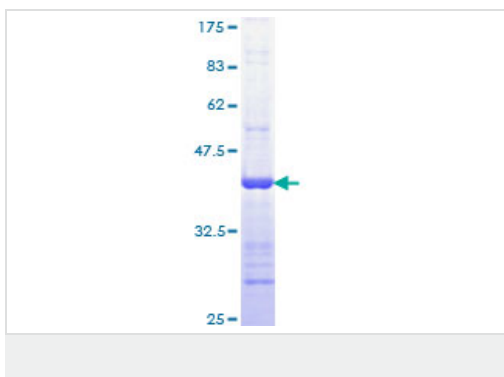
pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCl

### General Info

<b>Function</b>	Calcium-independent, phospholipid-dependent, serine- and threonine-specific kinase. May play a 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).
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	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.
<b>Domain</b>	The OPR domain mediates interaction with SQSTM1. The C1 domain does not bind diacylglycerol (DAG).
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	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.

## Images



ab159205 on a 12.5% SDS-PAGE stained with Coomassie Blue.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish

- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors