

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.

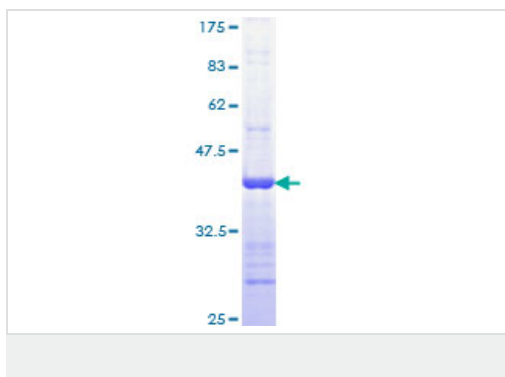
pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	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).
Tissue specificity	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.
Sequence similarities	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.
Domain	The OPR domain mediates interaction with SQSTM1. The C1 domain does not bind diacylglycerol (DAG).
Post-translational modifications	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.
Cellular localization	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.

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