

# Anti-PKC iota (phospho T555 + T563) antibody ab5813

**20 References**   **1 图像**

### 概述

产品名称	Anti-PKC iota (phospho T555 + T563)抗体
描述	兔多克隆抗体to PKC iota (phospho T555 + T563)
宿主	Rabbit
特异性	This antibody reacts with PKC lambda immunoprecipitates, indicating cross-reactivity for PKC lambda [pT563]. PKC zeta [pT560] (83% homologous) has been shown to cross-react by peptide competition. Peptide competition also suggests that this antibody may partially cross-react with PKC beta 1 [pS642] (58% homologous) and PKC nu [pT655] (42% homologous).
经测试应用	<b>适用于:</b> Flow Cyt, WB
种属反应性	<b>与反应:</b> Mouse, Human
免疫原	Synthetic peptide corresponding to PKC iota (phospho T555 + T563).
阳性对照	WB: Jurkat cells.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	<p>pH: 7.30</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: PBS, 0.1% BSA</p>
纯度	Immunogen affinity purified
纯化说明	The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated PKC iota. The final product is generated by affinity chromatography using a PKC iota-derived peptide that is

phosphorylated at threonine 555.

克隆

多克隆

同种型

IgG

## 应用

### The Abpromise guarantee

**Abpromise™**承诺保证使用ab5813于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		Use at an assay dependent concentration.
WB		1/1000. Detects a band of approximately 76 kDa.

## 靶标

### 功能

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).

### 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).

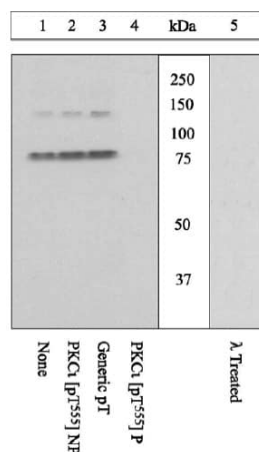
### 翻译后修饰

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



Western blot - Anti-PKC iota (phospho T555 + T563) antibody (ab5813)

Peptide Competition and Phosphatase Treatment: Lysates prepared from Jurkat cells stimulated with PMA were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were either left untreated (1-4) or treated with lambda phosphatase (5), blocked with a 5% low-fat milk-TBST buffer for one hour at room temperature, and incubated with ab5813 antibody for two hours at room temperature in a 3% low-fat milk-TBST buffer, following prior incubation with: no peptide (1), the non-phosphopeptide corresponding to the immunogen (2), a generic phosphothreonine-containing peptide (3), or the phosphopeptide immunogen (4). After washing, membranes were incubated with goat F(ab')<sub>2</sub> anti-rabbit IgG HRP conjugate and bands were detected using the Pierce SuperSignal<sup>TM</sup> method. The data show that the phosphopeptide corresponding to PKC iota [pT555] blocks the antibody signal. The peptide corresponding to PKC zeta [pT560] blocks the antibody signal and the peptides corresponding to PKC isoforms beta 1 [pT642] and gamma [pT655] partially block the antibody signal (data not shown), suggesting cross-reactivity of the antibody with these sites. The antibody signal was not blocked by the corresponding peptides of any other PKC isoforms. The data also show that phosphatase stripping eliminates the signal, verifying that the antibody is phospho-specific.

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