# abcam

# Product datasheet

# Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] ab124735



Recombinant

RabMAb

## 5 Images

#### Overview

Product name Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951]

**Description** Rabbit monoclonal [EPR5951] to Phospholipase C beta 3/PLCB3

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IP

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**Positive control** HCT 116, 293T, and A431, HeLa cell lysates; Human breast and colon tissues.

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb $^{\otimes}$  technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb^{\otimes} patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

supernatant

Purity Protein A purified

1

ClonalityMonoclonalClone numberEPR5951IsotypeIgG

### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab124735 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 150 kDa (predicted molecular weight: 139 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.

**Application notes** Is unsuitable for Flow Cyt,ICC/IF or IP.

**Target** 

**Function** The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-

trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C

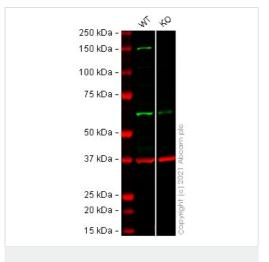
enzymes.

Sequence similarities Contains 1 C2 domain.

Contains 1 PI-PLC X-box domain.
Contains 1 PI-PLC Y-box domain.

Cellular localization Membrane.

### **Images**



Western blot - Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] (ab124735)

**All lanes :** Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] (ab124735) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2 :** PLCB3 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

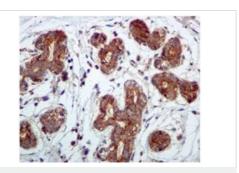
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 139 kDa **Observed band size:** 150 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab124735 observed at 150 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

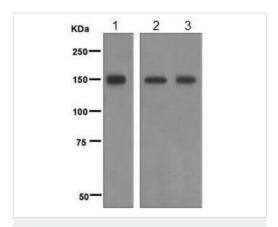
ab124735 was shown to react with Phospholipase C beta 3/PLCB3 in wild-type HeLa cells in Western blot with loss of signal observed in PLCB3 knockout cell line <a href="mailto:ab266034">ab266034</a> (PLCB3 knockout cell line <a href="mailto:ab258122">ab258122</a>). Wild-type HeLa and PLCB3 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween<sup>®</sup>) before incubation with ab124735 and <a href="mailto:ab8245">ab82245</a> (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] (ab124735)

ab124735 at 1/100 dilution staining Phospholipase C beta 3/PLCB3 in paraffin-embedded Human breast tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] (ab124735)

**All lanes :** Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] (ab124735) at 1/1000 dilution

Lane 1: HCT 116 cell lysate

Lane 2: 293T (Human embryonic kidney epithelial cell) cell lysate

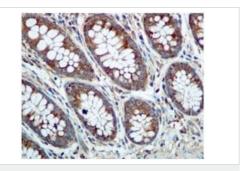
Lane 3: A431 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: Goat anti-Rabbit HRP at 1/2000 dilution

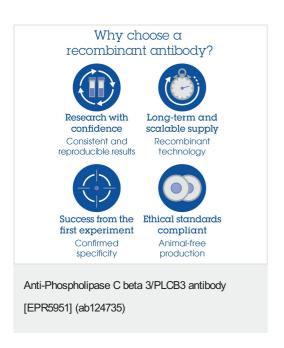
Predicted band size: 139 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Phospholipase C beta 3/PLCB3 antibody [EPR5951] (ab124735)

ab124735 at 1/100 dilution staining Phospholipase C beta 3/PLCB3 in paraffin-embedded Human colon tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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