


## Product datasheet

# Anti-PI 3 Kinase p85 alpha antibody [M253] ab86714

★★★★★ [10 Abreviews](#) [173 References](#) [4 Images](#)

### Overview

---

<b>Product name</b>	Anti-PI 3 Kinase p85 alpha antibody [M253]
<b>Description</b>	Mouse monoclonal [M253] to PI 3 Kinase p85 alpha
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat, Chicken 
<b>Immunogen</b>	Recombinant fragment corresponding to Human PI 3 Kinase p85 alpha (C terminal).
<b>Positive control</b>	A431 or Jurkat whole cell lysate ( <a href="#">ab7899</a> ). This antibody gave a positive result in IHC in the following FFPE tissue: Human skeletal muscle.
<b>General notes</b>	<p>Phosphoinositide 3-kinase (PI3K) phosphorylates phosphatidylinositol (PI), PI-4-phosphate and PI-4,5-bisphosphate to catalyze the production of PI-3,4,5-triphosphate. Growth factors and hormones activate PI 3 Kinase to coordinate various cellular events, such as cell growth, cell cycle entry, cell migration and cell survival.</p> <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>

### Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 50% Glycerol, 49% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number M253  
Isotype IgG2a

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab86714 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	★★★★★ (3)	1/1000. Detects a band of approximately 85 kDa (predicted molecular weight: 85 kDa).
IHC-P	★★★★★ (1)	Use a concentration of 5 µg/ml.
ICC/IF	★★★★★ (4)	Use at an assay dependent concentration.

## Target

**Function** Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues.

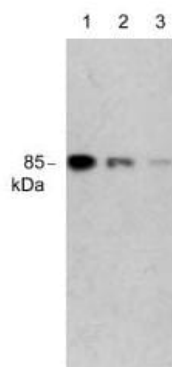
**Tissue specificity** Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level).

**Sequence similarities** Belongs to the PI3K p85 subunit family.  
Contains 1 Rho-GAP domain.  
Contains 2 SH2 domains.  
Contains 1 SH3 domain.

**Domain** The SH3 domain mediates the binding to CBLB, and to HIV-1 Nef.

**Post-translational modifications** Polyubiquitinated in T-cells by CBLB; which does not promote proteasomal degradation but impairs association with CD28 and CD3Z upon T-cell activation.  
Phosphorylated. Dephosphorylated by PTPRJ.

## Images



Western blot - Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714)

**Lane 1** : Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714) at 1/1000 dilution

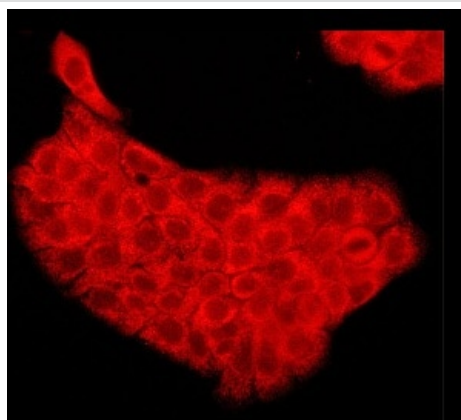
**Lane 2** : Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714) at 1/2000 dilution

**Lane 3** : Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714) at 1/4000 dilution

**All lanes** : A431 cell lysate

**Predicted band size:** 85 kDa

**Observed band size:** 85 kDa



Immunocytochemistry/ Immunofluorescence - Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714)

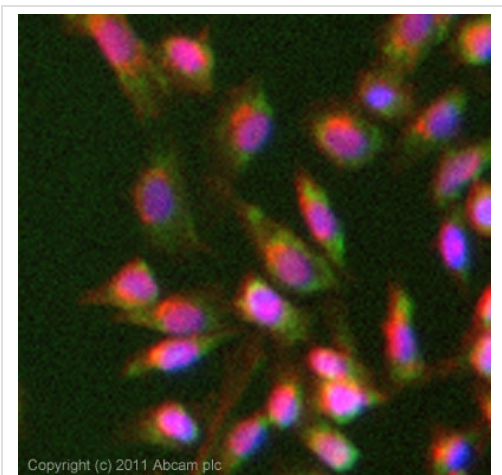
Immunocytochemical labeling of PI 3 Kinase p85 in aldehyde-fixed and NP-40-permeabilized A431 cells. The cells were labeled with ab86714, then the antibody was detected using appropriate secondary antibody conjugated to DyLight<sup>®</sup> 594.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714)

IHC image of PI 3 Kinase p85 staining in Human skeletal muscle formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer ([ab64236](#)) (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab86714, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-PI 3 Kinase p85 alpha antibody [M253] (ab86714)

ICC/IF image of ab86714 stained SKNSH cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum ([ab7481](#)) / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab86714, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96879](#), DyLight® 488 goat anti-mouse IgG (H+L) ([ab96871](#)) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

#### 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 <https://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