# abcam

## Product datasheet

# Recombinant human Pik3ca + PIK3R1 protein ab85833

### 2 Images

**Description** 

Product name Recombinant human Pik3ca + PIK3R1 protein

**Biological activity**The Specific activity of ab85833 was determined to be 5147 RLU/min/mg.

**Purity** > 90 % Densitometry.

Affinity purified.

Expression system Baculovirus infected Sf9 cells

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

#### **Specifications**

Our Abpromise guarantee covers the use of ab85833 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

Functional Studies

SDS-PAGE

Form Liquid

#### **Preparation and Storage**

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

pH: 7.00

Preservative: 1.02% Imidazole

Constituents: 0.00174% PMSF, 0.82% Sodium phosphate, 0.0308% DTT, 25% Glycerol

(glycerin, glycerine), 1.74% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

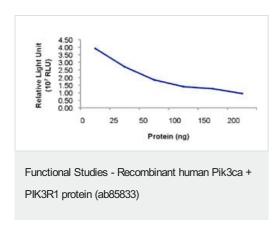
#### **General Info**

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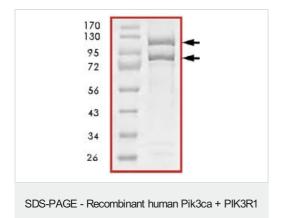
#### Relevance

The enzyme phosphatidylinositol 3 kinase (PI3 kinase) is a lipid kinase that generates phosphatidylinositol 3, 4, 5-triphosphate in response to receptor activation in many signal transduction pathways. Class IA PI3Ks exist as a heterodimer of a catalytic 110 kDa (p110) and a regulatory p85 subunit (e.g. p85 alpha). p85 alpha is an adaptor molecule that regulates the activity of the catalytic p110 subunit by binding to phosphorylated receptor tyrosine kinases (RTKs) through its SH2 domain and mediating the interaction between p110 and the plasma membrane. p85 alpha is necessary for insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Four isoforms of p110 has been found; alpha, beta, gamma, and the delta subunit. The alpha isoform, also known as PI3KCA, is a transforming oncogene that was shown to have activating mutations in nine types of cancers such as colon, brain, breast and stomach.

#### **Images**



The Specific activity of ab85833 was determined to be 5147 RLU/min/mg.



protein (ab85833)

SDS-PAGE showing ab85833 with bands at approximately 111 (Pik3ca) and 86kDa (PIK3R1).

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

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- · Replacement or refund for products not performing as stated on the datasheet
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- 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

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