

## Product datasheet

# Anti-PI 3 Kinase p85 beta antibody ab70956

1 Image

### Overview

<b>Product name</b>	Anti-PI 3 Kinase p85 beta antibody
<b>Description</b>	Rabbit polyclonal to PI 3 Kinase p85 beta
<b>Tested applications</b>	<b>Suitable for:</b> WB, ELISA
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide corresponding to amino acid residues surrounding Y464 of human PI 3 Kinase p85 beta conjugated to KLH.
<b>Positive control</b>	293 cell lysate transiently transfected with the PI 3 Kinase p85 beta gene.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium Azide Constituents: PBS
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	ab70956 is first purified by protein A affinity chromatography. Then, the antibody fraction is peptide affinity purified in a 2 step procedure with the control and phosphorylated peptides. The non phospho specific antibody is eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab70956** in the following tested applications.

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

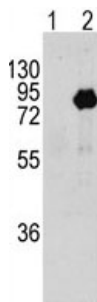
Application	Abreviews	Notes
WB		1/50 - 1/100. Detects a band of approximately 82 kDa (predicted molecular weight: 82 kDa).

Application	Abreviews	Notes
ELISA		1/1000.

## Target

<b>Function</b>	Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (PubMed:23604317). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement.
<b>Involvement in disease</b>	Megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 1
<b>Sequence similarities</b>	Belongs to the PI3K p85 subunit family. Contains 1 Rho-GAP domain. Contains 2 SH2 domains. Contains 1 SH3 domain.
<b>Domain</b>	The SH2 2 domain is required for interaction with FBXL2 and PTPN13.
<b>Post-translational modifications</b>	Phosphorylated in response to signaling from activated receptor-type protein kinases (PubMed:19690332, PubMed:20068231). Dephosphorylated by PTPRJ (PubMed:18348712). Dephosphorylated at Tyr-655 by PTPN13. Phosphorylation of Tyr-655 impairs while its dephosphorylation promotes interaction with FBXL2 and SCF(FBXL2)-mediated polyubiquitination (PubMed:23604317). Ubiquitinated. Polyubiquitination by the SCF(FBXL2) complex probably promotes proteasomal degradation of PIK3R2.

## Images



Western blot - PI 3 Kinase regulatory subunit beta (phospho Y464) antibody (ab70956)

**All lanes :** Anti-PI 3 Kinase p85 beta antibody (ab70956) at 1/50 dilution

**Lane 1 :** 293 cell lysates (nontransfected)

**Lane 2 :** 293 cell lysates transiently transfected with the PI 3 Kinase p85 beta gene

Lysates/proteins at 2 µg per lane.

**Predicted band size :** 82 kDa

**Observed band size :** 82 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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