

Product datasheet

Anti-PI 3 Kinase p85 beta antibody ab71052

2 Images

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> IHC-P, WB, ELISA
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide corresponding to amino acid residues surrounding Y467 of human PI 3 Kinase p85 beta
<b>Positive control</b>	Lysate from transfected 293 cell lysate; Human brain tissue .

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium Azide Constituents: PBS
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	The antibody was purified through a protein A column, followed by peptide affinity purification.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab71052** 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
IHC-P		1/10 - 1/50.
WB		1/50 - 1/100. Predicted molecular weight: 82 kDa.
ELISA		1/1000.

## Target

### Function

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.

### Involvement in disease

Megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 1

### Sequence similarities

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

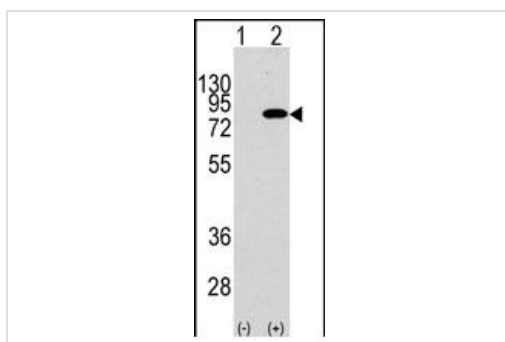
### Domain

The SH2 2 domain is required for interaction with FBXL2 and PTPN13.

### Post-translational modifications

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 p85 beta (phospho Y467) antibody (ab71052)

**All lanes :** Anti-PI 3 Kinase p85 beta antibody (ab71052) at 1/50 dilution

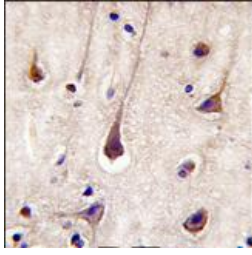
**Lane 1 :** 293 cell lysate, non transfected

**Lane 2 :** 293 cell lysate, 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



1/10 ab71052, staining PI 3 Kinase p85 beta in formalin fixed, paraffin embedded human brain tissue (peroxidase conjugated secondary antibody, DAB staining).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - PI 3 Kinase p85 beta (phospho Y467) antibody (ab71052)

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