

Datasheet for ABIN872304

## anti-PIK3CB antibody (pSer1070)



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4 Images

1 Publication

### Overview

Quantity:	100 µL
Target:	PIK3CB
Binding Specificity:	pSer1070
Reactivity:	Human, Mouse, Rat, Dog, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIK3CB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

### Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human PI3 Kinase p110 beta around the phosphorylation site of Ser1070
Isotype:	IgG
Specificity:	This phosphorylation site is homologous to that of Ser1064 in Mouse and Ser1070 in Rat.
Cross-Reactivity:	Dog, Human, Mouse, Rabbit, Rat
Predicted Reactivity:	Cow,Pig,Horse,Chicken,Guinea Pig
Purification:	Purified by Protein A.

## Target Details

Target:	PIK3CB
Alternative Name:	PI3 Kinase p110 beta ( <a href="#">PIK3CB Products</a> )
Background:	<p>Synonyms: Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta isoform, PI3-kinase subunit beta, PI3K-beta, PI3Kbeta, PtdIns-3-kinase subunit beta, Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subunit beta, PtdIns-3-kinase subunit p110-beta, p110beta, PIK3CB, PIK3C1</p> <p>Background: Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and 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. Involved in the activation of AKT1 upon stimulation by G-protein coupled receptors (GPCRs) ligands such as CXCL12, sphingosine 1-phosphate, and lysophosphatidic acid. May also act downstream receptor tyrosine kinases. Required in different signaling pathways for stable platelet adhesion and aggregation. Plays a role in platelet activation signaling triggered by GPCRs, alpha-IIb/beta-3 integrins (ITGA2B/ ITGB3) and ITAM (immunoreceptor tyrosine-based activation motif)-bearing receptors such as GP6. Regulates the strength of adhesion of ITGA2B/ ITGB3 activated receptors necessary for the cellular transmission of contractile forces. Required for platelet aggregation induced by F2 (thrombin) and thromboxane A2 (TXA2). Has a role in cell survival. May have a role in cell migration. Involved in the early stage of autophagosome formation. Modulates the intracellular level of PtdIns3P (Phosphatidylinositol 3-phosphate) and activates PIK3C3 kinase activity. May act as a scaffold, independently of its lipid kinase activity to positively regulate autophagy. May have a role in insulin signaling as scaffolding protein in which the lipid kinase activity is not required. May have a kinase-independent function in regulating cell proliferation and in clathrin-mediated endocytosis. Mediator of oncogenic signal in cell lines lacking PTEN. The lipid kinase activity is necessary for its role in oncogenic transformation. Required for the growth of ERBB2 and RAS driven tumors.</p>
Gene ID:	5291
UniProt:	<a href="#">P42338</a>

## Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000

## Application Details

IHC-P 1:200-400  
IHC-F 1:100-500  
IF(IHC-P) 1:50-200  
IF(IHC-F) 1:50-200  
IF(ICC) 1:50-200

Restrictions: For Research Use only

## Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

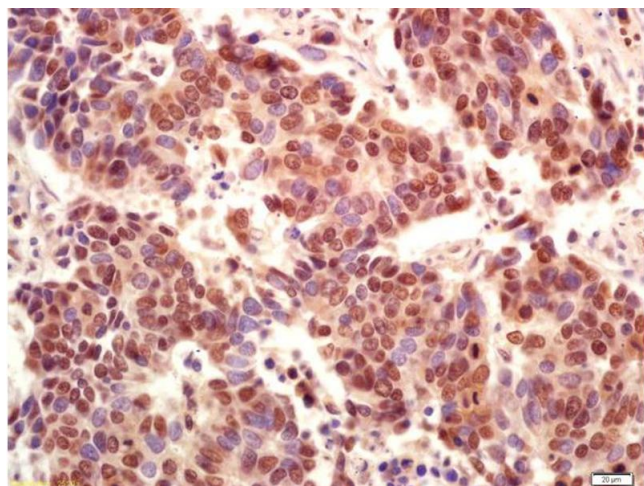
Storage: 4 °C, -20 °C

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

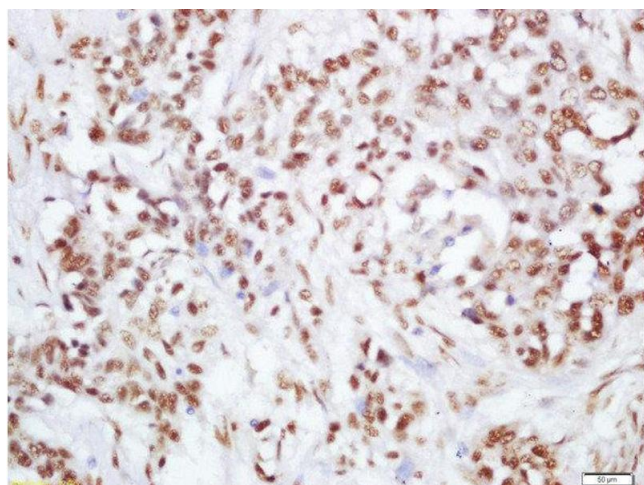
## Publications

Product cited in: Qiao, Rong, Wang, Zhang: "Involvement of Akt/GSK3β/CREB signaling pathway on chronic omethoate induced depressive-like behavior and improvement effects of combined lithium chloride and astaxanthin treatment." in: **Neuroscience letters**, Vol. 649, pp. 55-61, (2017) ([PubMed](#)).



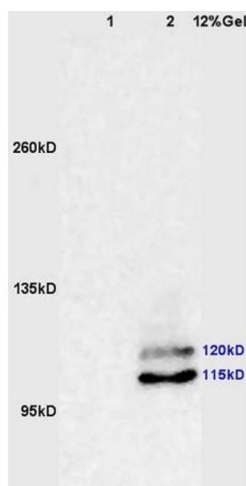
#### Immunohistochemistry

**Image 1.** Formalin-fixed and paraffin embedded human lung carcinoma labeled with Anti-phospho-PI3 Kinase p110 beta(Ser1070) Polyclonal Antibody, Unconjugated (ABIN872304) at 1:200 followed by conjugation to the secondary antibody and DAB staining



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Formalin-fixed and paraffin embedded human lung carcinoma labeled with Rabbit Anti-PI3 Kinase p110 beta(Ser1070) Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining



#### SDS-PAGE

**Image 3.** Lane 1: human colon carcinoma lysates Lane 2: mouse brain lysates probed with Anti phospho-PI3 Kinase p110 beta(Ser1070) Polyclonal Antibody, Unconjugated (ABIN872304) at 1:200 in 4 °C. Followed by conjugation to secondary antibody at 1:3000 90min in 37 °C. Predicted band 110-123kD. Observed band size: 115,120kD.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN872304.