

For Research Use Only

# PI3 Kinase p110 Beta Monoclonal antibody

Catalog Number: 67121-1-Ig **26 Publications**



## Basic Information

<b>Catalog Number:</b> 67121-1-Ig	<b>GenBank Accession Number:</b> BC114432	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul, Concentration: 2000 ug/ml by Nanodrop and 1107 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 5291	<b>CloneNo.:</b> 1B2A1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P42338	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:150-1:600 IF/ICC 1:1000-1:4000
<b>Isotype:</b> IgG1	<b>Full Name:</b> phosphoinositide-3-kinase, catalytic, beta polypeptide	
<b>Immunogen Catalog Number:</b> AG17505	<b>Calculated MW:</b> 1070 aa, 123 kDa	
	<b>Observed MW:</b> 120-130 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Cited Applications:**  
WB, IHC

**Species Specificity:**  
human, rat

**Cited Species:**  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HEK-293 cells, HeLa cells, MCF-7 cells, SH-SY5Y cells, PC-12 cells

**IHC:** human lung cancer tissue, human colon cancer tissue, human cervical cancer tissue

**IF/ICC:** HeLa cells,

## Background Information

PIK3CB (phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta isoform) is also named as PIK3C1, PI3K-beta, p110beta. The gene encodes a 1070 amino acid protein which belongs to the PI3/PI4-kinase family. Phosphoinositide 3-kinases (PI3Ks) have been implicated as participants in signaling pathways regulating cell growth by virtue of their activation in response to various mitogenic stimuli. The class I PI3 kinases are heterodimers composed of 110 kDa catalytic subunits that associate with regulatory adaptor proteins. Four class I catalytic subunits have been identified, PIK3CA (p110 $\alpha$ ), PIK3CB (p110 $\beta$ ), PIK3CD (p110 $\delta$ ) and PIK3CG (p110 $\gamma$ ) (PMID:19177002).

## Notable Publications

Author	Pubmed ID	Journal	Application
Fei Liu	36497344	Cancers (Basel)	WB
Han Xu	36434729	Chin Med	WB
Ruichuang Yang	34824590	Evid Based Complement Alternat Med	WB

## Storage

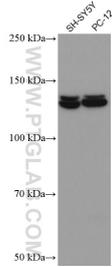
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

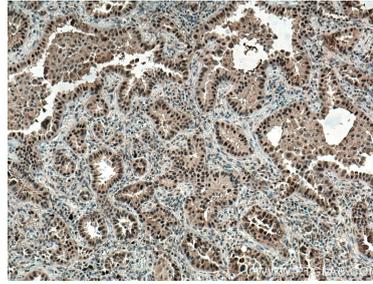
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

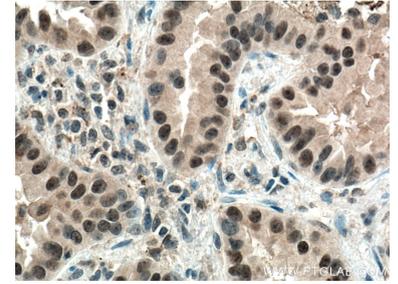
## Selected Validation Data



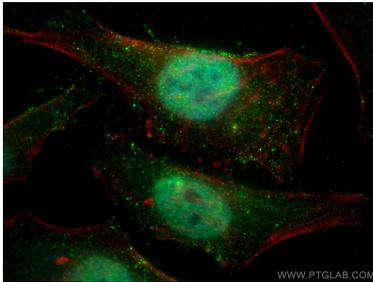
Various lysates were subjected to SDS PAGE followed by western blot with 67121-1-Ig (PIK3CB antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 67121-1-Ig (PIK3CB antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 67121-1-Ig (PIK3CB antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PI3 Kinase p110 Beta antibody (67121-1-Ig, Clone: 1B2A1 ) at dilution of 1:2000 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), CL594-phalloidin (red).