

For Research Use Only

# PI3 Kinase p110 Beta Polyclonal antibody



Catalog Number: 20584-1-AP

Featured Product

355 Publications

## Basic Information

### Catalog Number:

20584-1-AP

### Size:

650  $\mu$ g/ml

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_006219

### GeneID (NCBI):

5291

### UNIPROT ID:

P42338

### Full Name:

phosphoinositide-3-kinase, catalytic, beta polypeptide

### Calculated MW:

123 kDa

### Observed MW:

110-130 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:200-1:1000

IP 0.5-4.0  $\mu$ g for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

FC, IHC, IP, WB, ELISA

### Cited Applications:

IF, IHC, CoIP

### Species Specificity:

human, rat

### Cited Species:

human, chicken, rat, mouse, rabbit, fish, zebrafish, pig, canine, Megalobrama amblycephala

**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: rat liver tissue,

IP: HepG2 cells,

IHC: human lung cancer tissue,

## 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). This antibody is specific to PIK3CB.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yangmeng Zhao	36178125	Redox Rep	
Tong Li	33152931	Biomed Pharmacother	
Samana Batool	30274346	Int J Mol Sci	

## 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

For technical support and original validation data for this product please contact:

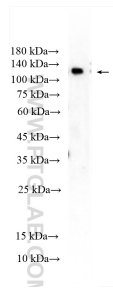
T: 4006900926

E: Proteintech-CN@ptglab.com

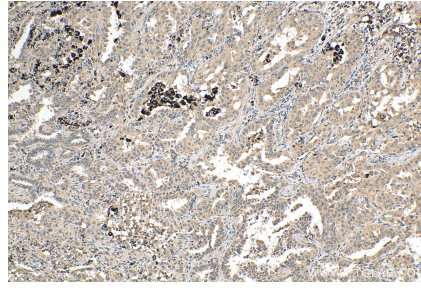
W: ptgcn.com

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

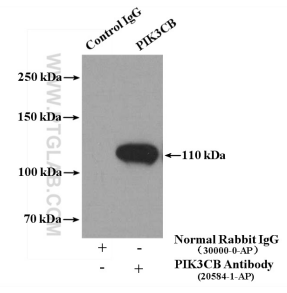
## Selected Validation Data



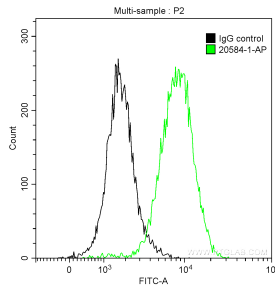
rat liver tissue were subjected to SDS PAGE followed by western blot with 20584-1-AP (PI3 Kinase p110 Beta antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 20584-1-AP (PI3 Kinase p110 Beta antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PI3 Kinase p110 Beta (IP:20584-1-AP, 4ug; Detection:20584-1-AP 1:300) with HepG2 cells lysate 2700ug.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.2 ug Anti-Human PI3 Kinase p110 Beta (20584-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.