

For Research Use Only

PI3 Kinase p110 Beta Polyclonal antibody

Catalog Number: 20584-1-AP

Featured Product

504 Publications



Basic Information

Catalog Number:

20584-1-AP

Concentration:

650 ug/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 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, CoIP

Species Specificity:

human, rat

Cited Species:

human, mouse, rat, pig, rabbit, canine, chicken, zebrafish, fish, 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, mouse brain tissue

IF/ICC: HepG2 cells,

FC (Intra): 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 α), PIK3CB (p110 β), PIK3CD (p110 δ) and PIK3CG (p110 γ) (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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

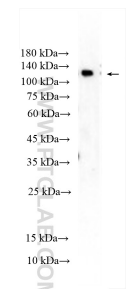
T: 4006900926

E: Proteintech-CN@ptglab.com

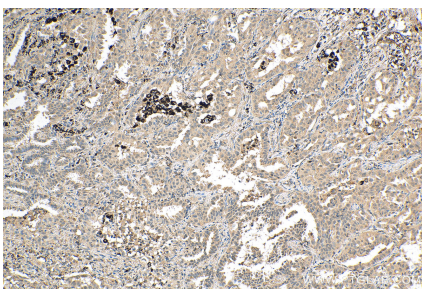
W: ptgcn.com

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

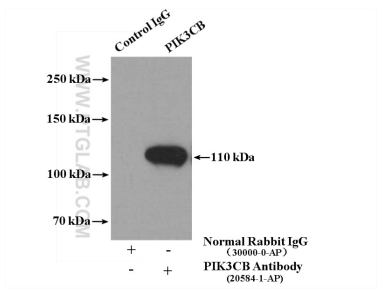
Selected Validation Data



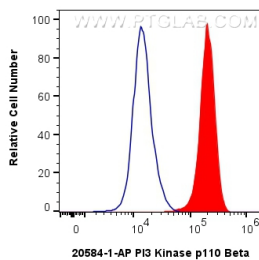
rat liver tissue were subjected to SDS PAGE followed by western blot with 20584-1-AP (PI3 Kinase p110 Beta antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



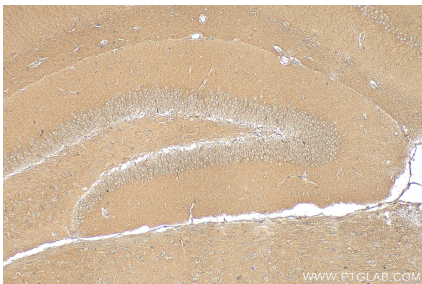
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 20584-1-AP (PI3 Kinase p110 Beta antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



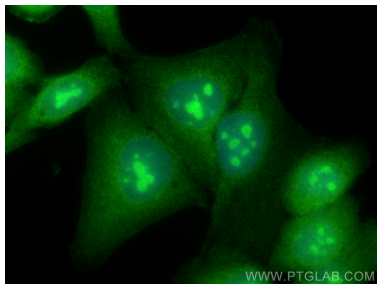
IP result of anti-PI3 Kinase p110 Beta (IP:20584-1-AP, 4ug; Detection:20584-1-AP 1:300) with HepG2 cells lysate 2700ug.



1x10⁶ HeLa cells were intracellularly stained with 0.8 ug PI3 Kinase p110 Beta Polyclonal antibody (20584-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20584-1-AP (PI3 Kinase p110 Beta antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PI3 Kinase p110 Beta antibody (20584-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).