

For Research Use Only

# PI3 Kinase p110 Alpha Polyclonal antibody



Catalog Number: 21890-1-AP

18 Publications

## Basic Information

**Catalog Number:**

21890-1-AP

**Size:**

240 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG16586

**GenBank Accession Number:**

BC113601

**GeneID (NCBI):**

5290

**UNIPROT ID:**

P42336

**Full Name:**

phosphoinositide-3-kinase, catalytic, alpha polypeptide

**Calculated MW:**

1068 aa, 124 kDa

**Observed MW:**

110 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:3000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

IF 1:50-1:500

## Applications

**Tested Applications:**

FC, IF/ICC, IHC, IP, WB, ELISA

**Cited Applications:**

IHC, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse, rat

**Positive Controls:**

**WB:** human brain tissue, Jurkat cells

**IP:** mouse heart tissue,

**IHC:** human lung cancer tissue, human breast cancer tissue

**IF:** MCF-7 cells,

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

## Background Information

PIK3CA belongs to the PI3/PI4-kinase family. It phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2 with a preference for PtdIns(4,5)P2. Defects in PIK3CA are associated with colorectal cancer (CRC). Defects in PIK3CA are associated with breast cancer. Defects in PIK3CA are associated with ovarian cancer. Defects in PIK3CA may underlie hepatocellular carcinoma (HCC). Defects in PIK3CA are a cause of keratosis seborrheic (KERSEB).

## Notable Publications

Author	Pubmed ID	Journal	Application
Koichi Baba	28894280	Sci Rep	WB
Binwu Hu	28932123	Onco Targets Ther	WB
Li Jia	29030743	Dig Dis Sci	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

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

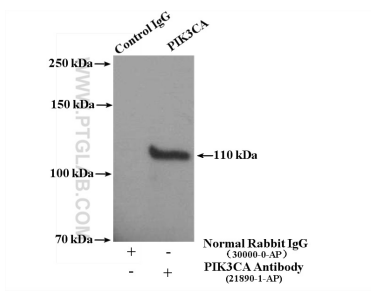
T: 4006900926

E: Proteintech-CN@ptglab.com

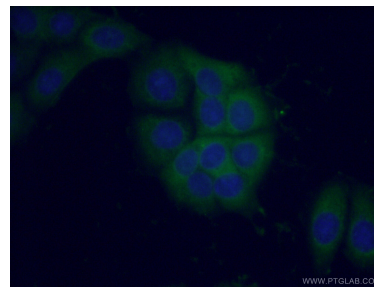
W: ptgcn.com

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

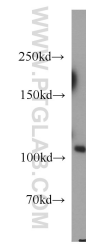
## Selected Validation Data



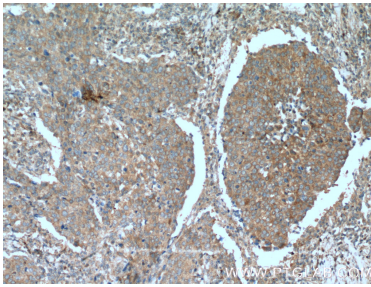
IP result of anti-PI3 Kinase p110 Alpha (IP:21890-1-AP, 4ug; Detection:21890-1-AP 1:300) with mouse heart tissue lysate 3600 ug.



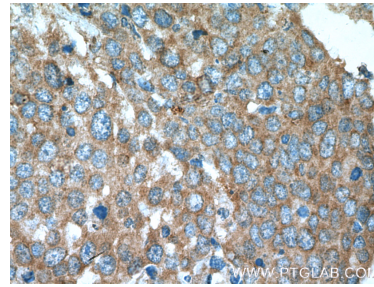
Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using 21890-1-AP (PI3K p110(alpha) antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



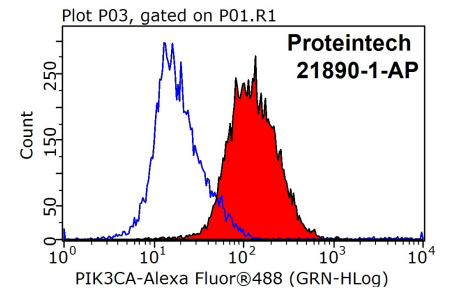
human brain tissue were subjected to SDS PAGE followed by western blot with 21890-1-AP (PI3K p110(alpha) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 21890-1-AP (PI3K p110(alpha) antibody) at dilution of 1:200 (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 21890-1-AP (PI3K p110(alpha) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



$1 \times 10^6$  Jurkat cells were stained with 0.5ug PI3K p110(alpha) antibody (21890-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.