

PI 3-kinase p110α Polyclonal Antibody

Catalog No: YT3709

Reactivity: Human; Mouse; Rat

Applications: IF;WB;IHC;ELISA

Target: PI 3-kinase p110a

Fields: >>Inositol phosphate metabolism;>>Metabolic pathways;>>EGFR tyrosine

kinase inhibitor resistance;>>Endocrine resistance;>>Platinum drug

resistance;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Phosphatidylinositol signaling system;>>Sphingolipid signaling pathway;>>Phospholipase D signaling

system;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>Pl3K-Akt signaling pathway;>>Apoptosis;>>Longevity regulating pathway;>>Longevity regulating pathway;>>Cellular

senescence;>>Axon guidance;>>VEGF signaling pathway;>>Osteoclast

differentiation;>>Focal adhesion;>>Signaling pathways regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil extracellular trap formation;>>Toll-

like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>Natural killer cell mediat

Gene Name: PIK3CA

Protein Name: Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform

Human Gene ld: 5290

Human Swiss Prot P42336

No:

Mouse Gene Id: 18706

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

PI 3-kinase p110alpha. AA range:470-519

Specificity: PI 3-kinase p110α Polyclonal Antibody detects endogenous levels of PI 3-kinase

p110a protein.

P42337



Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source : Polyclonal, Rabbit, IgG

Dilution: IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 110kD

Cell Pathway : Inositol phosphate metabolism; ErbB_HER; Chemokine; Phosphatidylinositol

signaling system;mTOR;Apoptosis Inhibition;Apoptosis Mitochondrial;Apoptosis

_Overview;VEGF;Focal adhesion;Toll_Like;Jak_STAT;Natur

Background: Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and

a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has been defined on

chromosome 22. [provided by RefSeq, Apr 2016],

Function: catalytic activity:ATP + 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate = ADP

+ 1-phosphatidyl-1D-myo-inositol 3,4,5-trisphosphate.,disease:Defects in PIK3CA are associated with breast cancer [MIM:114480].,disease:Defects in

PIK3CA are associated with colorectal cancer (CRC)

[MIM:114500]., disease: Defects in PIK3CA are associated with ovarian cancer [MIM:167000]. Ovarian cancer is the leading cause of death from gynecologic malignancy. It is characterized by advanced presentation with loco-regional

dissemination in the peritoneal cavity and the rare incidence of visceral

metastases. These typical features relate to the biology of the disease, which is a principal determinant of outcome.,disease:Defects in PIK3CA may underlie hepatocellular carcinoma (HCC) [MIM:114550].,disease:PI3KCA mutations affecting exons 9 and 20 display gender-and tissue-specific patterns, thus

suggesting that the

Subcellular Location:

intracellular,cytosol,plasma membrane,phosphatidylinositol 3-kinase complex,phosphatidylinositol 3-kinase complex, class IA,lamellipodium,

Expression : Brain, Lung,

Tag: orthogonal

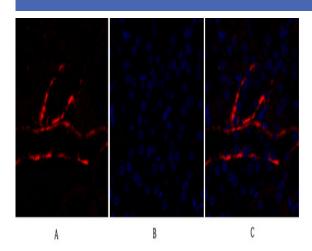
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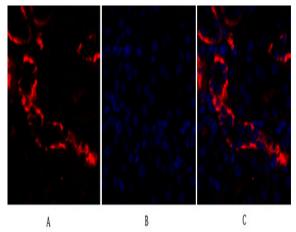
Host: Rabbit

Modifications: Unmodified

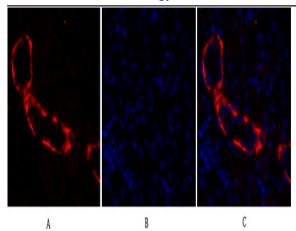
Products Images



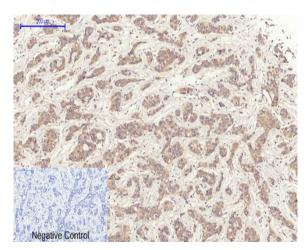
Immunofluorescence analysis of rat-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody(red) was diluted at 1:200(4 $^{\circ}$ C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



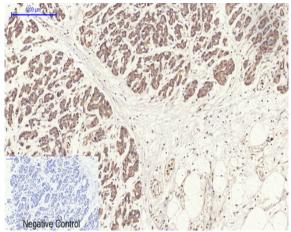
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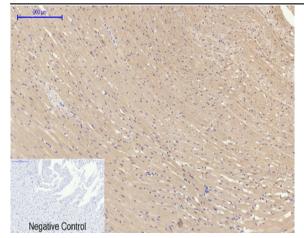
Immunofluorescence analysis of mouse-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody(red) was diluted at 1:200(4 $^{\circ}$ C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



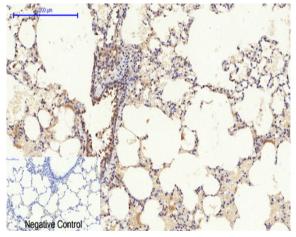
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



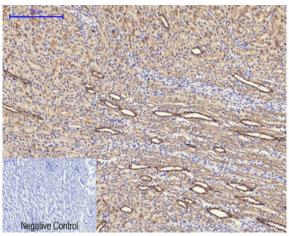
Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



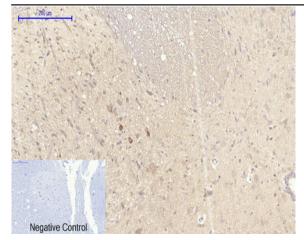
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4 $^{\circ}$ C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 $^{\circ}$ C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



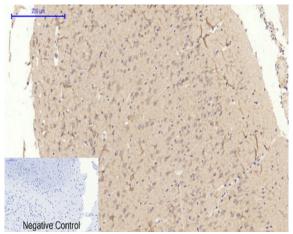
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



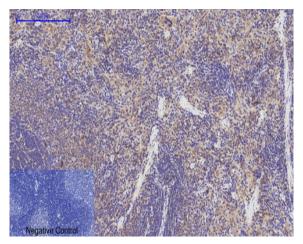
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



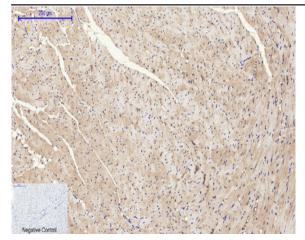
Immunohistochemical analysis of paraffin-embedded Rat-spinal-cord tissue. 1,PI 3-kinase p110α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



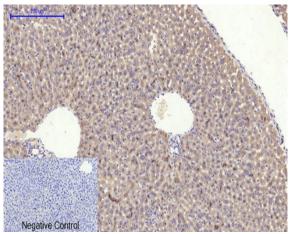
Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



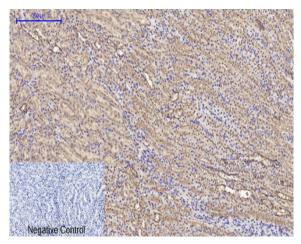
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4 $^{\circ}$ C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 $^{\circ}$ C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



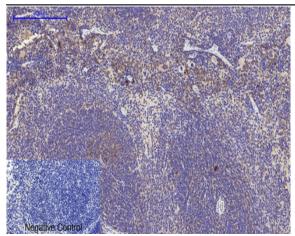
Immunohistochemical analysis of paraffin-embedded Mouseheart tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



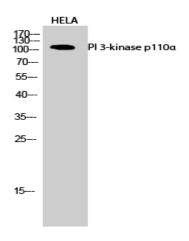
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



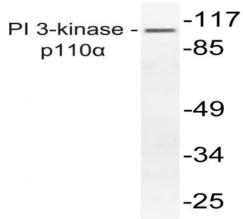
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4 $^{\circ}$ C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 $^{\circ}$ C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-spleen tissue. 1,PI 3-kinase p110 α Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of HELA cells using PI 3-kinase p110 α Polyclonal Antibody diluted at 1:2000



Western blot analysis of lysate from mouse liver, using PI 3-kinase p110 α antibody.