



PI 3-kinase p110α Polyclonal Antibody

Catalog No	YP-Ab-14913
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IF;WB;IHC;ELISA
Gene Name	PIK3CA
Protein Name	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform
Immunogen	The antiserum was produced against synthesized peptide derived from human PI 3-kinase p110α. AA range:470-519
Specificity	PI 3-kinase p110α Polyclonal Antibody detects endogenous levels of PI 3-kinase p110α protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PIK3CA; Phosphatidylinositol 4; 5-bisphosphate 3-kinase catalytic subunit alpha isoform; PI3-kinase subunit alpha; PI3K-alpha; PI3Kalpha; PtdIns-3-kinase subunit alpha; Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subunit
Observed Band	110kD
Cell Pathway	intracellular,cytosol,plasma membrane,phosphatidylinositol 3-kinase complex,phosphatidylinositol 3-kinase complex, class IA,lamellipodium,
Tissue Specificity	Brain,Lung,
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

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],

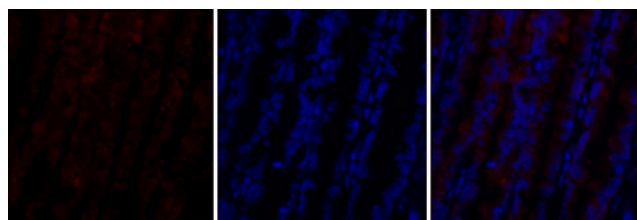
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

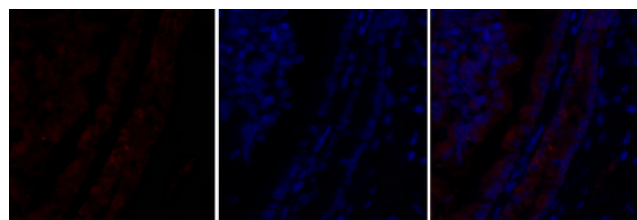


A

B

C

Immunofluorescence analysis of rat-lung tissue. 1,PI 3-kinase p110 α Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled 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

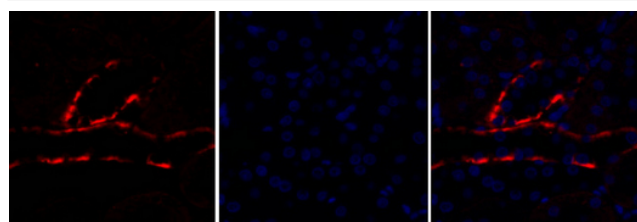


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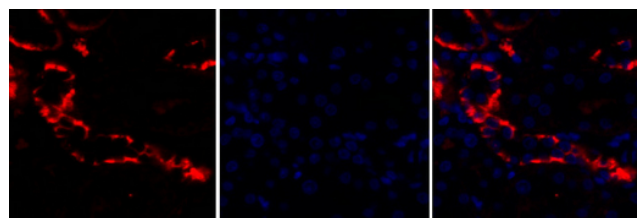


A

B

C

Immunofluorescence analysis of rat-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled 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

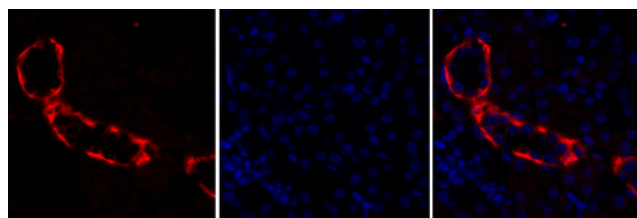


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Immunofluorescence analysis of rat-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture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



A

B

C

Immunofluorescence analysis of mouse-kidney tissue. 1,PI 3-kinase p110 α Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled 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