



## Rabbit Anti-PIK3CA antibody

SL2067R

<b>Product Name:</b>	PIK3CA
<b>Chinese Name:</b>	磷脂酰肌醇激酶催化亚单位A抗体
<b>Alias:</b>	PI3 kinase p110 subunit alpha; caPI3K; MGC142161; MGC142163; p110 alpha; p110 alpha; Phosphatidylinositol 3 kinase catalytic alpha polypeptide; Phosphatidylinositol 3 kinase catalytic 110 KD alpha; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha isoform; Phosphoinositide 3 kinase catalytic alpha polypeptide; PI3 kinase p110 subunit alpha; PI3K; PI3KC A; PIK3C A; PK3CA; PtdIns 3 kinase p110; PI3-kinase P110 $\alpha$ ; PI3-kinase p110 subunit alpha; PI 3 Kinase catalytic subunit alpha; PK3CA_HUMAN; PI3 kinase P110 $\alpha$ .
<b>文献引用</b> PubMed :	<p><b>Specific References(1)</b> SL2067R has been referenced in 1 publications.</p> <p><b>[IF=2.88]</b>Paul-Samojedny, Monika, et al. "Knockdown of AKT3 (PKB<math>\gamma</math>) and PI3KCA Suppresses Cell Viability and Proliferation and Induces the Apoptosis of Glioblastoma Multiforme T98G Cells." BioMed Research International 2014 (2014). <b>WB;Human.</b></p> <p style="text-align: right;"><a href="#">PubMed:24967401</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Cow,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	117kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human PI3KCA:961-1068/1068
<b>Lsotype:</b>	IgG

<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>PI3-Kinases (PI3-Ks) are a family of lipid kinases that are implicated in signal transduction. Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The p85 subunit localize PI3-K activity to the plasma membrane while the p110 subunit contains the catalytic domain of PI3-K which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdInsP2. Four isoforms of p110 has been found; alpha, beta, gamma, and the delta subunit. The alpha isoform, also known as PI3KCA, is a transforming oncogene that was shown to have activating mutations in nine types of cancers such as colon, brain, breast and stomach.</p> <p><b>Function:</b>  PI3K that phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2 to generate PIP3. PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Participates in cellular signaling in response to various growth factors. Involved in the activation of AKT1 upon stimulation by receptor tyrosine kinases ligands such as EGF, insulin, IGF1, VEGFA and PDGF. Involved in signaling via insulin-receptor substrate proteins. Essential in endothelial cell migration during vascular development through VEGFA signaling, possibly by regulating RhoA activity. Required for lymphatic vasculature development, possibly by binding to RAS and by activation by EGF and FGF2, but not by PDGF. Regulates invadopodia formation in breast cancer cells through the PDK1-AKT1 pathway. Participates in cardiomyogenesis in embryonic stem cells through a AKT1 pathway. Participates in vasculogenesis in embryonic stem cells through PDK1 and protein kinase C pathway. Has also serine-protein kinase activity: phosphorylates PIK3R1, EIF4EBP1 and HRAS.</p> <p><b>Subunit:</b>  Heterodimer of a catalytic subunit PIK3CA and a p85 regulatory subunit (PIK3R1, PIK3R2 or PIK3R3). Interacts with IRS1 in nuclear extracts. Interacts with RUFY3. Interacts with RASD2. Interacts with APPL1. Interacts with HRAS1 and KRAS. Interaction with HRAS1/KRAS is required for PI3K pathway signaling and cell proliferation stimulated by EGF and FGF2.</p> <p><b>DISEASE:</b>  Defects in PIK3CA are associated with colorectal cancer (CRC) [MIM:114500]. Defects in PIK3CA are a cause of susceptibility to breast cancer (BC) [MIM:114480]. A common malignancy originating from breast epithelial tissue. Breast neoplasms can be distinguished by their histologic pattern. Invasive ductal carcinoma is by far the most common type. Breast cancer is etiologically and genetically heterogeneous. Important</p>

genetic factors have been indicated by familial occurrence and bilateral involvement. Mutations at more than one locus can be involved in different families or even in the same case.

Defects in PIK3CA are a cause of susceptibility to ovarian cancer (OC) [MIM:167000]. Ovarian cancer common malignancy originating from ovarian tissue. Although many histologic types of ovarian neoplasms have been described, epithelial ovarian carcinoma is the most common form. Ovarian cancers are often asymptomatic and the recognized signs and symptoms, even of late-stage disease, are vague. Consequently, most patients are diagnosed with advanced disease.

Defects in PIK3CA may underlie hepatocellular carcinoma (HCC) [MIM:114550].

Defects in PIK3CA are a cause of keratosis seborrheic (KERSEB) [MIM:182000]. A common benign skin tumor. Seborrheic keratoses usually begin with the appearance of one or more sharply defined, light brown, flat macules. The lesions may be sparse or numerous. As they initially grow, they develop a velvety to finely verrucous surface, followed by an uneven warty surface with multiple plugged follicles and a dull or lackluster appearance.

**Similarity:**

Belongs to the PI3/PI4-kinase family.

Contains 1 C2 PI3K-type domain.

Contains 1 PI3K-ABD domain.

Contains 1 PI3K-RBD domain.

Contains 1 PI3K/PI4K domain.

Contains 1 PIK helical domain.

**SWISS:**

P42336

**Gene ID:**

5290

**Database links:**

[Entrez Gene: 5290](#) Human

[Omim: 171834](#) Human

[SwissProt: P42336](#) Human

[Unigene: 553498](#) Human

[Unigene: 715194](#) Human

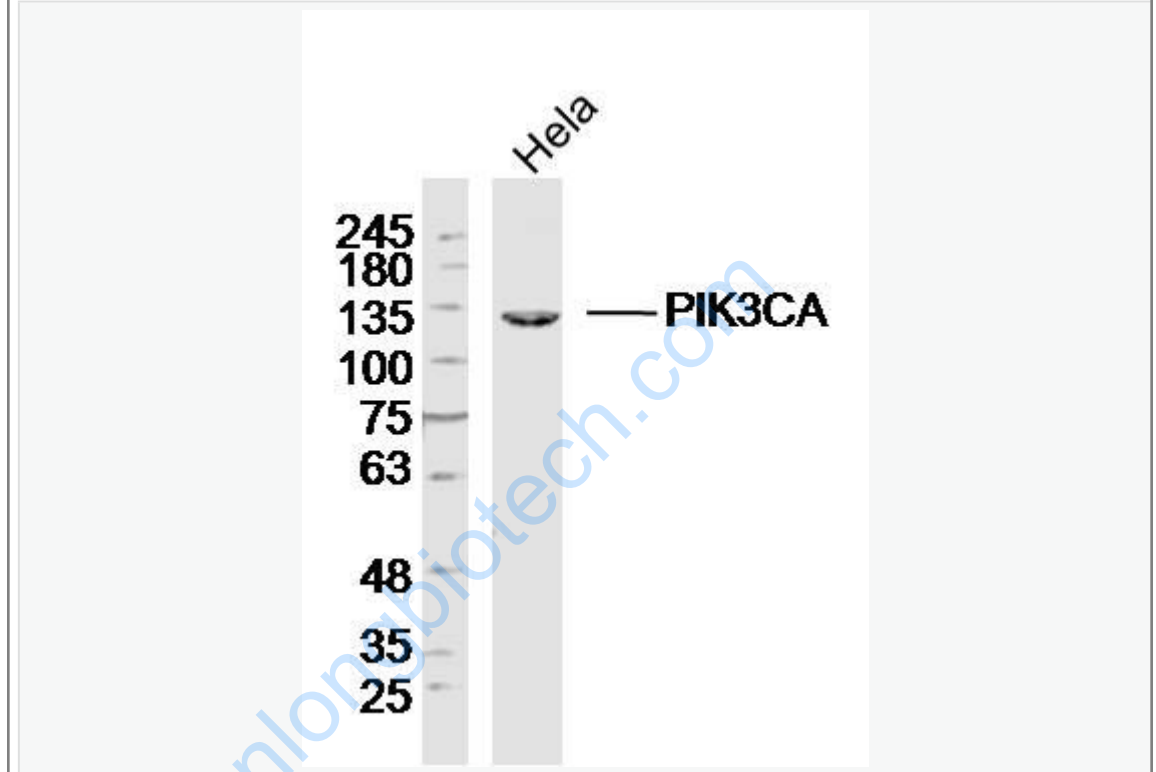
[Unigene: 85701](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

磷脂酰肌醇激酶(P110 $\alpha$ 亚单位)

Picture:



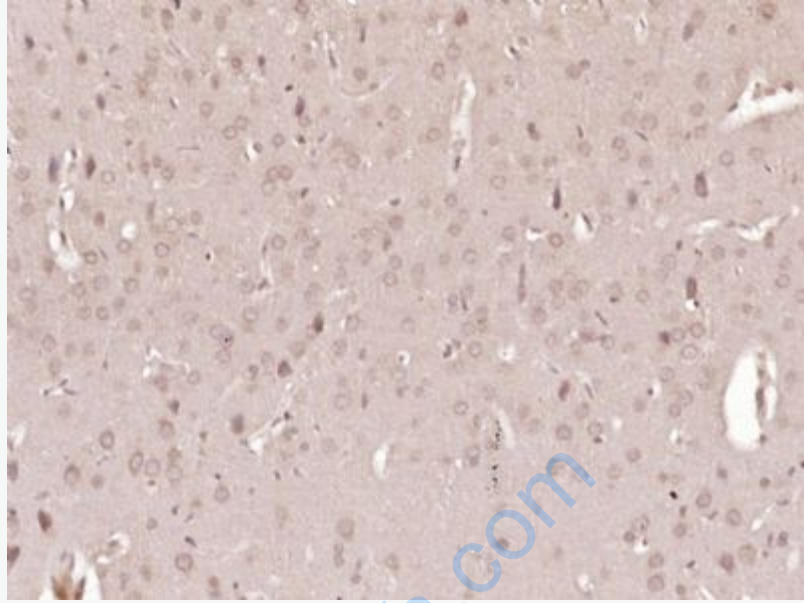
Sample: HeLa Cell(Human)Lysate at 40 ug

Primary: Anti-PIK3CA(SL2067R)at 1/300 dilution

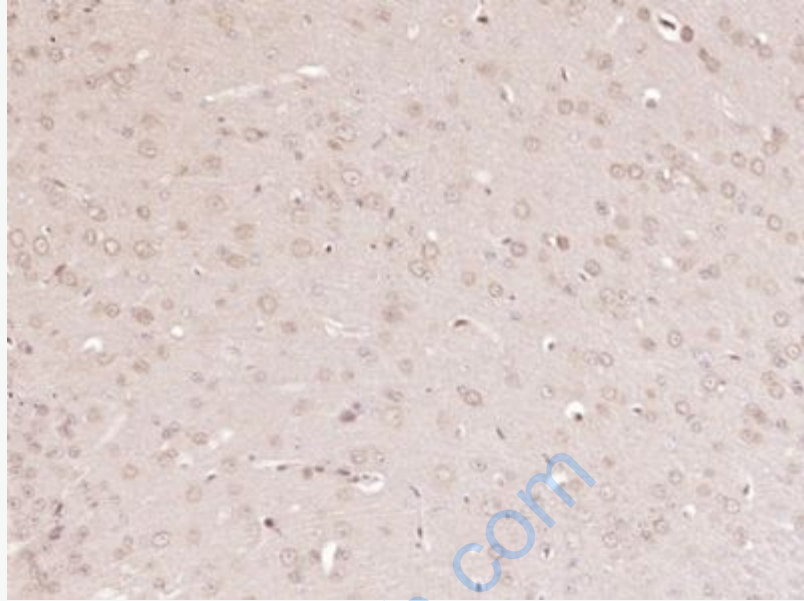
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 117kD

Observed band size: 120kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PIK3CA) Polyclonal Antibody, Unconjugated (SL2067R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PIK3CA) Polyclonal Antibody, Unconjugated (SL2067R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.