SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-phospho-PI3 Kinase p110 beta (Ser1070)antibody

Catalog Number: SL6417R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	phospho-PI3 Kinase p110 beta (Ser1070)
Immunogen:	KLH conjugated synthesised phosphopeptide derived from human PI3 Kinase p110 beta around the phosphorylation site of Ser1070: YR(p-S)
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 ICC/IF=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human, Mouse, Rat, (predicted: Chicken, Dog, Pig, Cow, Horse, Guinea Pig)
Predicted MW.:	110-123kDa
Subcellular Location:	The nucleus cytoplasmic
Background:	Phosphoinositide 3-kinases (PI 3-Ks) phosphorylate the 3'- OH position of the inositol ring of inositol lipids. They act as participants in signaling pathways that regulate cell growth by virtue of their activation in response to various mitogenic stimuli. PI 3-Ks are composed of a catalytic subunit, such as PI 3-kinase C2∫ (PIK3CB) and an adaptor subunit. PI 3-kinase C2∫ , also known as p110-∫, is a 1,070 amino acid protein that shares 42% identity with p110 of cow origin. It is expressed in several human and rodent cell lines. Studies predict that PI 3-kinase C2∫ has a role in modulating the formation and stability of å2B (ITGA2B)/∫3 (ITGB3) Integrin adhesion bonds, which are essential in shear force-induced platelet activation.

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	Phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2 with a preference for PtdIns(4,5)P2. **Subunit:** Heterodimer of a catalytic subunit PIK3CB and a p85 regulatory subunit (PIK3R1, PIK3R2 or PIK3R3). Interaction with PIK3R2 is required for nuclear localization and nuclear export. Part of a complex with PIK3R1 and PTEN. Binding to PTEN may antagonize the lipid kinase activity under normal growth conditions. Part of a complex involved in autophagosome formation composed of PIK3C3 and PIK3R4 (By similarity). Interacts with BECN1, ATG14 and RAB5A. **Subcellular Location:** Cytoplasm. Nucleus. Note=Interaction with PIK3R2 is required for nuclear localization and export. **Tissue Specificity:** Expressed ubiquitously. **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. **Database links:** **Entrez Gene:** 5291 Human **Entrez Gene:** 74769 Mouse **Entrez Gene:** 85243 Rat Omim: 602925 Human **SwissProt:** P42338 Human **SwissProt:** Q24JU2 Human **SwissProt:** Q3U4Q1 Mouse **SwissProt:** Q8BTI9 Mouse **SwissProt:** Q9Z1L0 Rat **Unigene:** 239818 Human **Unigene:** 213128 Mouse **Unigene:** 44268 Rat

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[VALIDATION IMAGES]

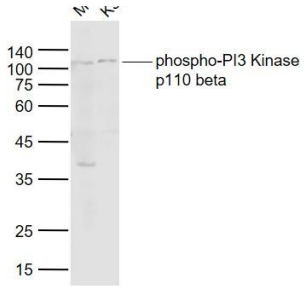


Figure 1. Sample: Lane 1: Human MCF-7 cell lysates Lane 2: Human K562 cell lysates Primary: Anti-phospho-PI3 Kinase p110 beta (Ser1070) (SL6417R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 110-123 kD Observed band size: 110 kD

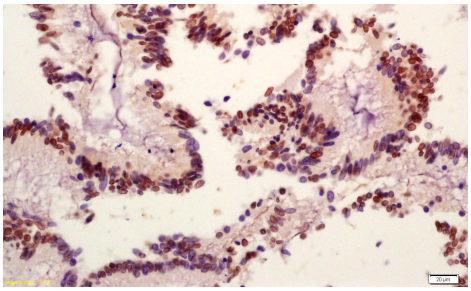


Figure 2. Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-phospho-PI3 Kinase p110 beta(Ser1070) Polyclonal Antibody, Unconjugated (SL6417R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

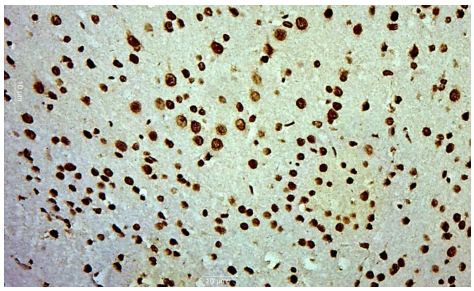


Figure 3. Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PI3 Kinase p110 beta(Ser1070)) Polyclonal Antibody, Unconjugated (SL6417R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining

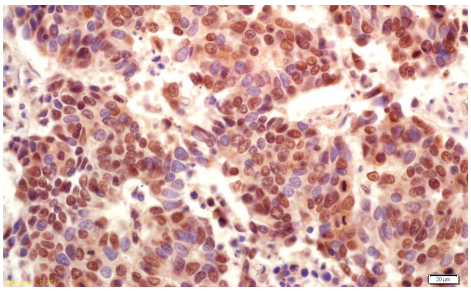


Figure 4. Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-phospho-PI3 Kinase p110 beta(Ser1070) Polyclonal Antibody, Unconjugated (SL6417R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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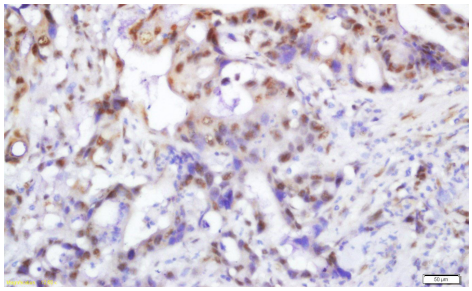


Figure 5. Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-phospho-PI3 Kinase p110 beta(Ser1070) Polyclonal Antibody, Unconjugated (SL6417R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

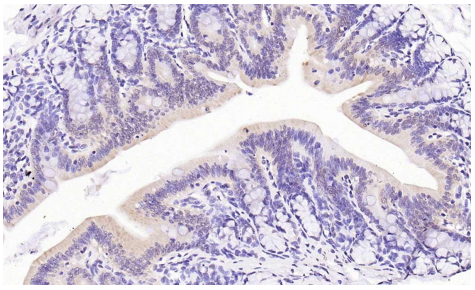


Figure 6. Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PI3 Kinase p110 beta (Ser1070)) Polyclonal Antibody, Unconjugated (SL6417R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

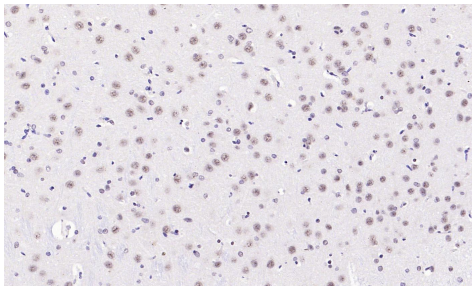


Figure 7. Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PI3 Kinase p110 beta (Ser1070)) Polyclonal Antibody, Unconjugated (SL6417R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

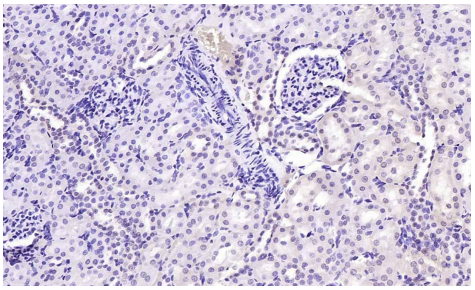


Figure 8. Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PI3 Kinase p110 beta (Ser1070)) Polyclonal Antibody, Unconjugated (SL6417R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

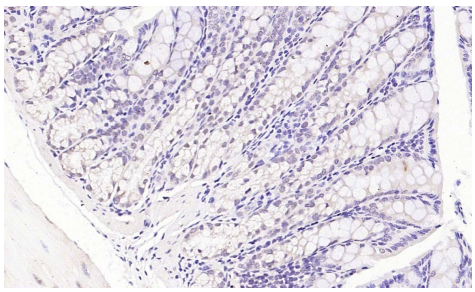


Figure 9. Paraformaldehyde-fixed, paraffin embedded (mouse colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PI3 Kinase p110 beta (Ser1070)) Polyclonal Antibody, Unconjugated (SL6417R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

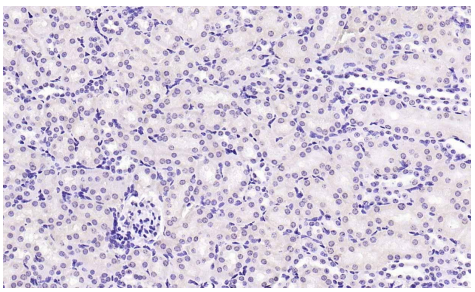


Figure 10. Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PI3 Kinase p110 beta (Ser1070)) Polyclonal Antibody, Unconjugated (SL6417R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining

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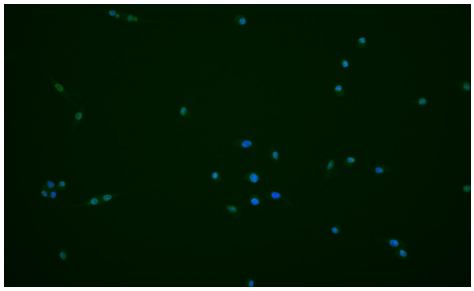


Figure 11. A431 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (phospho-PI3 Kinase p110 beta (Ser1070)) polyclonal Antibody, Unconjugated (SL6417R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei

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