SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-PIK3R1 antibody

SL0128R

Product Name	PIK3R1
Chinese Name	磷脂酰肌醇激酶抗体
Alias	P85A_HUMAN; Phosphatidylinositol 3-kinase regulatory subunit alpha; GRB1; PI3-kinase regu subunit alpha; PI3K regulatory subunit alpha; PtdIns-3-kinase regulatory subunit alpha; Phospha 3-kinase 85 kDa regulatory subunit alpha (PI3-kinase subunit p85-alpha; PtdIns-3-kinase regulat p85-alpha); PI 3-kinase p85α; PI 3-kinase p85 α; PI 3-kinase p85-α; SH3_PI3K_p85alpha; PI3-k subunit alpha; phosphoinositide-3-kinase regulatory subunit 1; p85; AGM7; IMD36; p85-ALPH Kinase p85 alpha;
Research Area	Tumour Cell biology immunology Neurobiology Signal transduction Apoptosis Kinases and Pho
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, (predicted: Chicken, Dog, Cow, Horse,)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-C （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	80kDa
Cellular localization	cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PI3 kinase p85 subunit alpha: 501-600/7
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles.

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

PubMed PubMed

Product Detail

The enzyme phosphatidylinositol 3 kinase (PI3 kinase) is a lipid kinase that generates phosphatic 4, 5-triphosphate in response to receptor activation in many signal transduction pathways. Class exist as a heterodimer of a catalytic 110 kDa (p110) and a regulatory p85 subunit (e.g. p85 alpha). an adaptor molecule that regulates the activity of the catalytic p110 subunit by binding to phosph receptor tyrosine kinases (RTKs) through its SH2 domain and mediating the interaction between plasma membrane. p85 alpha is necessary for insulin-stimulated increase in glucose uptake and g synthesis in insulin-sensitive tissues.

Function:
Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues.

Subunit:
Heterodimer of a regulatory subunit PIK3R1 and a p110 catalytic subunit (PIK3CA, PIK3CB or Interacts with FER. Interacts (via SH2 domain) with TEK/TIE2 (tyrosine phosphorylated). Intera PTK2/FAK1 (By similarity). Interacts with phosphorylated TOM1L1. Interacts with phosphoryl upon TCR and/or BCR activation. Interacts with SOCS7. Interacts with RUFY3. Interacts (via S with CSF1R (tyrosine phosphorylated). Interacts with LYN (via SH3 domain); this enhances enzy Interacts with phosphorylated LAT, LAX1 and TRAT1 upon TCR activation. Interacts with CBL with HIV-1 Nef to activate the Nef associated p21-activated kinase (PAK). This interaction depe C-terminus of both proteins and leads to increased production of HIV. Interacts with HCV NS5A domains interact with the YTHM motif of phosphorylated INSR in vitro. Also interacts with tyrosine-phosphorylated IGF1R in vitro. Interacts with CD28 and CD3Z upon T-cell activation. I IRS1 and phosphorylated IRS4, as well as with NISCH and HCST. Interacts with FASLG, KIT a Interacts with AXL, FGFR1, FGFR2, FGFR3 and FGFR4 (phosphorylated). Interacts with FGR. Interacts with PDGFRA (tyrosine phosphorylated) and PDGFRB (tyrosine phosphorylated). Inte ERBB4 (phosphorylated). Interacts with NTRK1 (phosphorylated upon ligand-binding).

Tissue Specificity:
Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac mus 2 and isoform 4 are present in skeletal muscle (at protein level).

Post-translational modifications:
Polyubiquitinated in T-cells by CBLB; which does not promote proteasomal degradation but imp association with CD28 and CD3Z upon T-cell activation.
Phosphorylated. Tyrosine phosphorylated in response to signaling by FGFR1, FGFR2, FGFR3 a Phosphorylated by CSF1R. Phosphorylated by ERBB4. Phosphorylated on tyrosine residues by Dephosphorylated by PTPRJ. Phosphorylated by PIK3CA at Ser-608; phosphorylation is stimula insulin and PDGF. The relevance of phosphorylation by PIK3CA is however unclear. Phosphory

response to KIT and KITLG/SCF. Phosphorylated by FGR.

Similarity:
Belongs to the PI3K p85 subunit family.
Contains 1 Rho-GAP domain.
Contains 2 SH2 domains.
Contains 1 SH3 domain.

SWISS:
P27986

Gene ID:
5295

Database links:

Entrez Gene: 5295 Human

Entrez Gene: 18708 Mouse

Entrez Gene: 25513 Rat

Omim: 171833 Human

SwissProt: P27986 Human

SwissProt: P26450 Mouse

SwissProt: Q63787 Rat

Unigene: 132225 Human

Kinases and Phosphatases（Kinases and Phosphatases）

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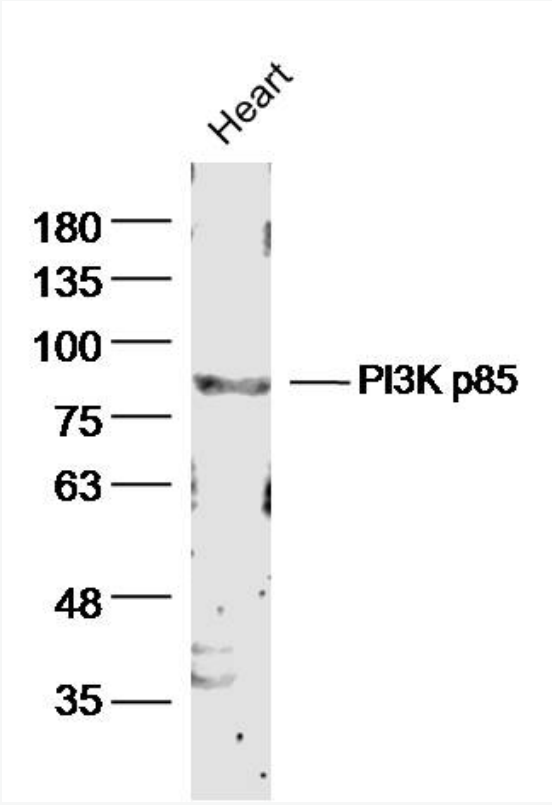
Product Picture



Sample: Heart (mouse) Lysate at 40 ug

Primary: Anti- PI3K p85 (SL0128R)at 1/300 dilution

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

Predicted band size: 80kD

Observed band size: 85 kD

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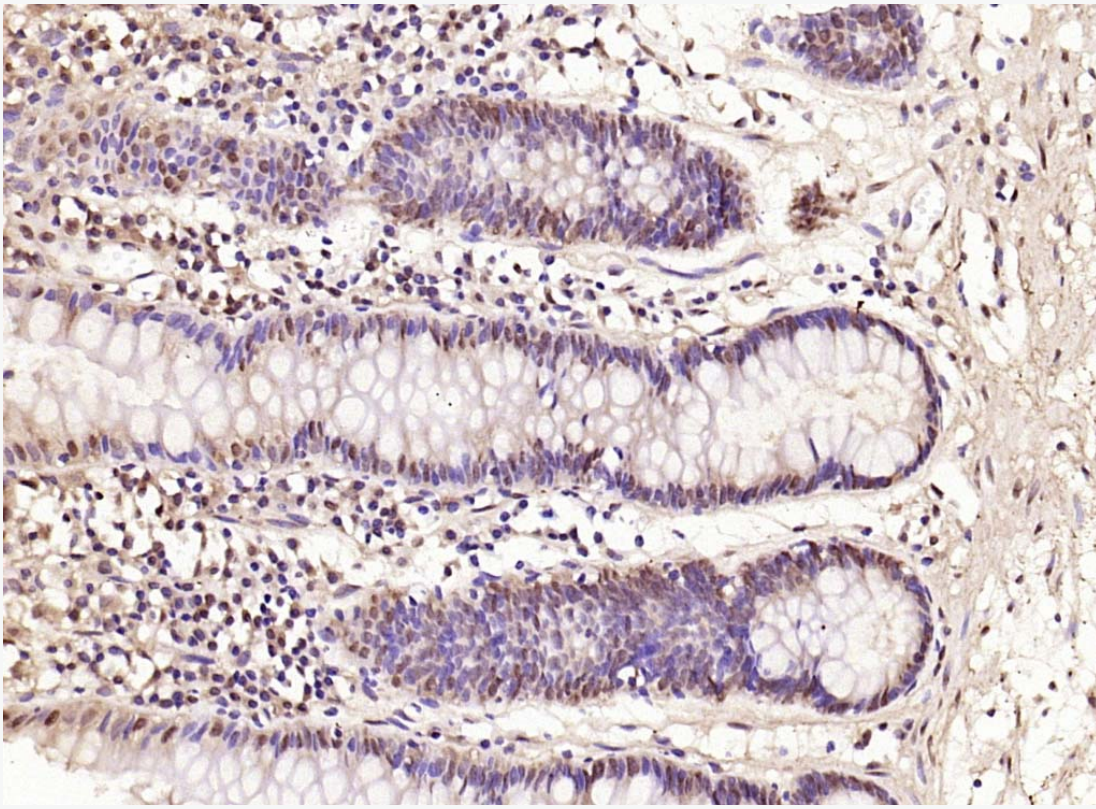

Paraformaldehyde-fixed, paraffin embedded (human rectal carcinoma); Antigen retrieval by b
sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen perox
minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (I
p85 alpha) Polyclonal Antibody, Unconjugated (SL0128R) at 1:2000 overnight at 4°C, follow
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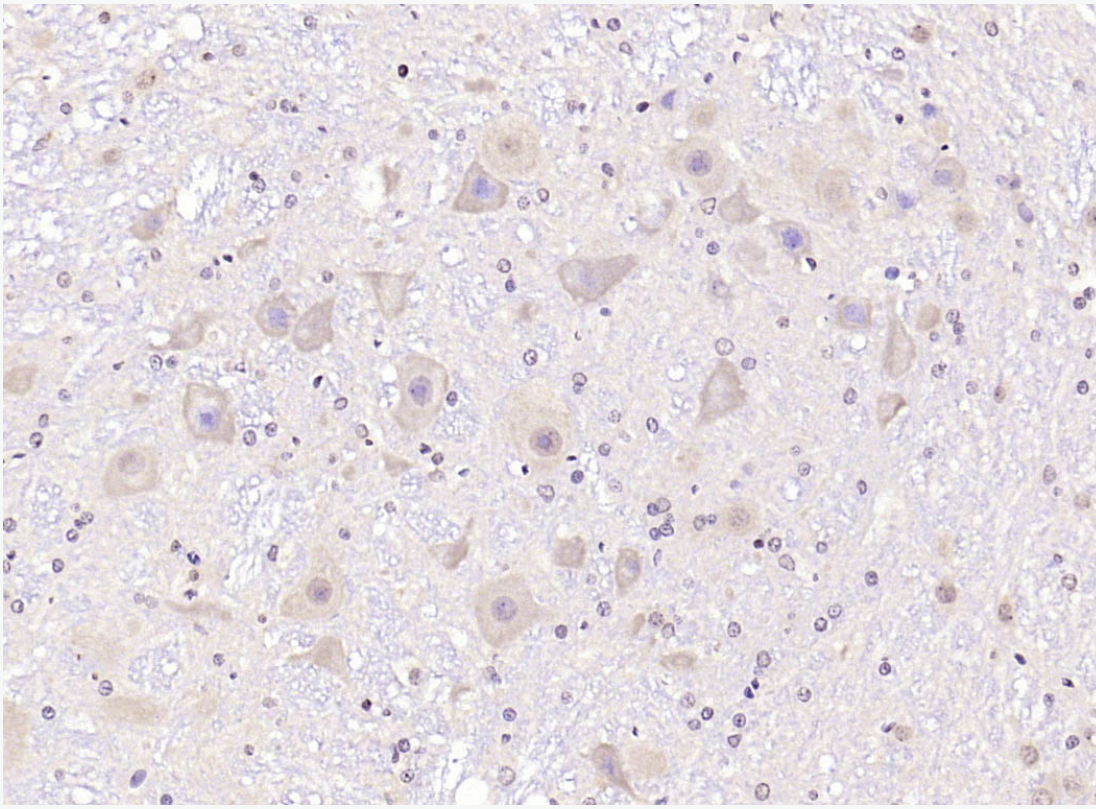

Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodiun buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PI 3 Kinase Polyclonal Antibody, Unconjugated (SL0128R) at 1:2000 overnight at 4°C, followed by opera according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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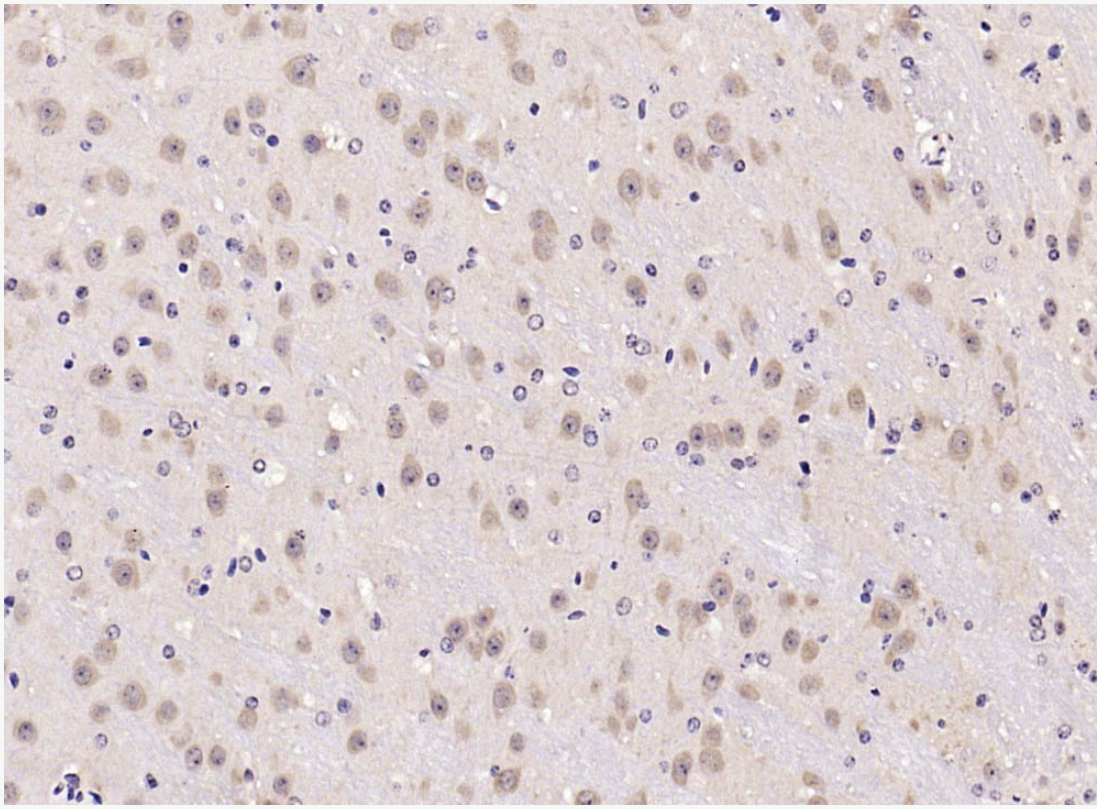

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in soc
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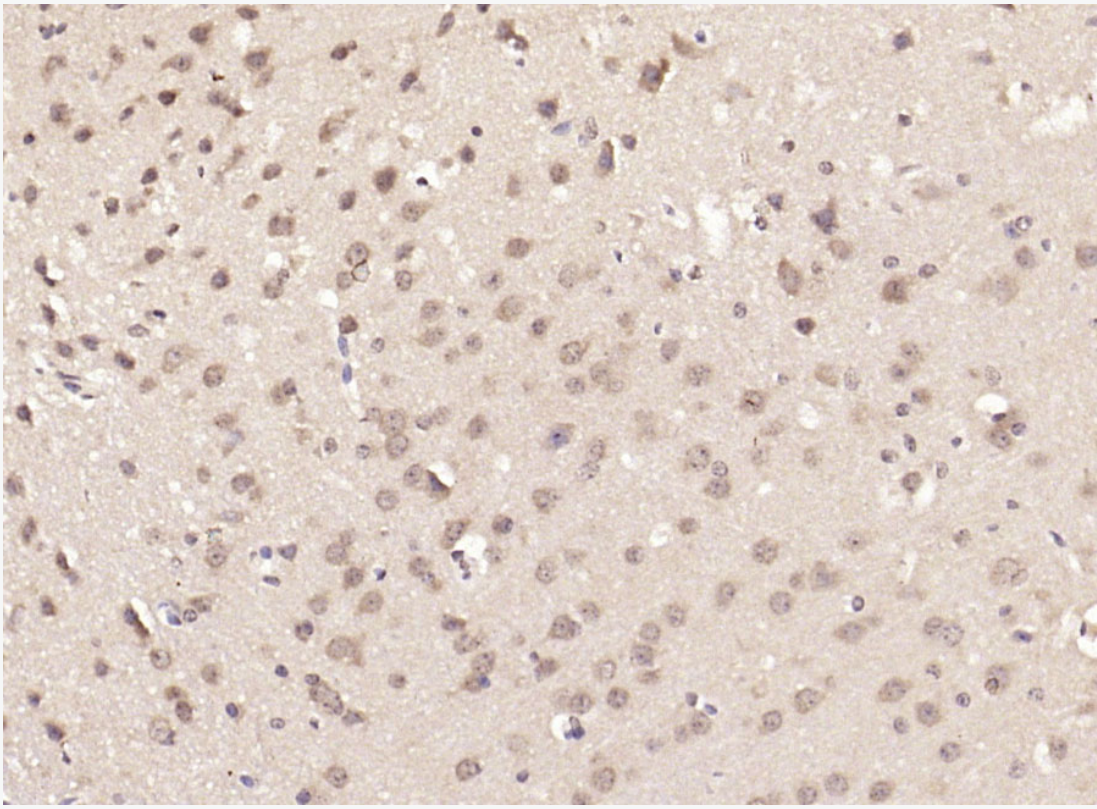

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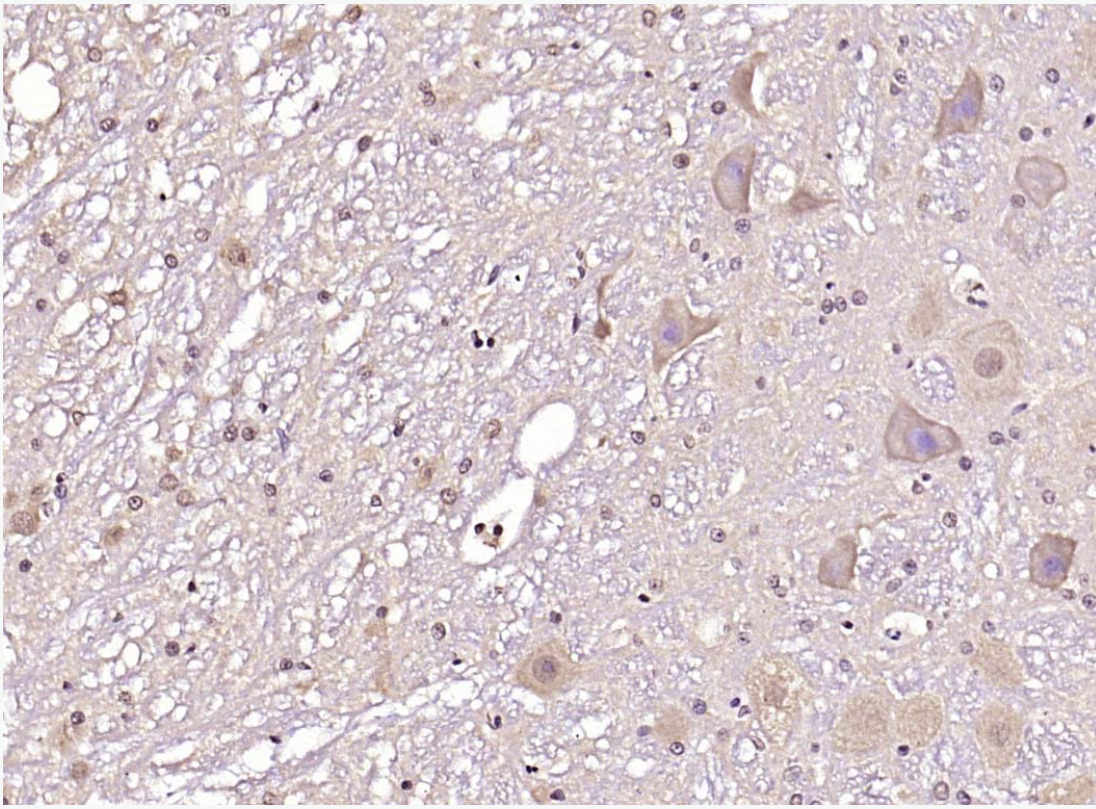

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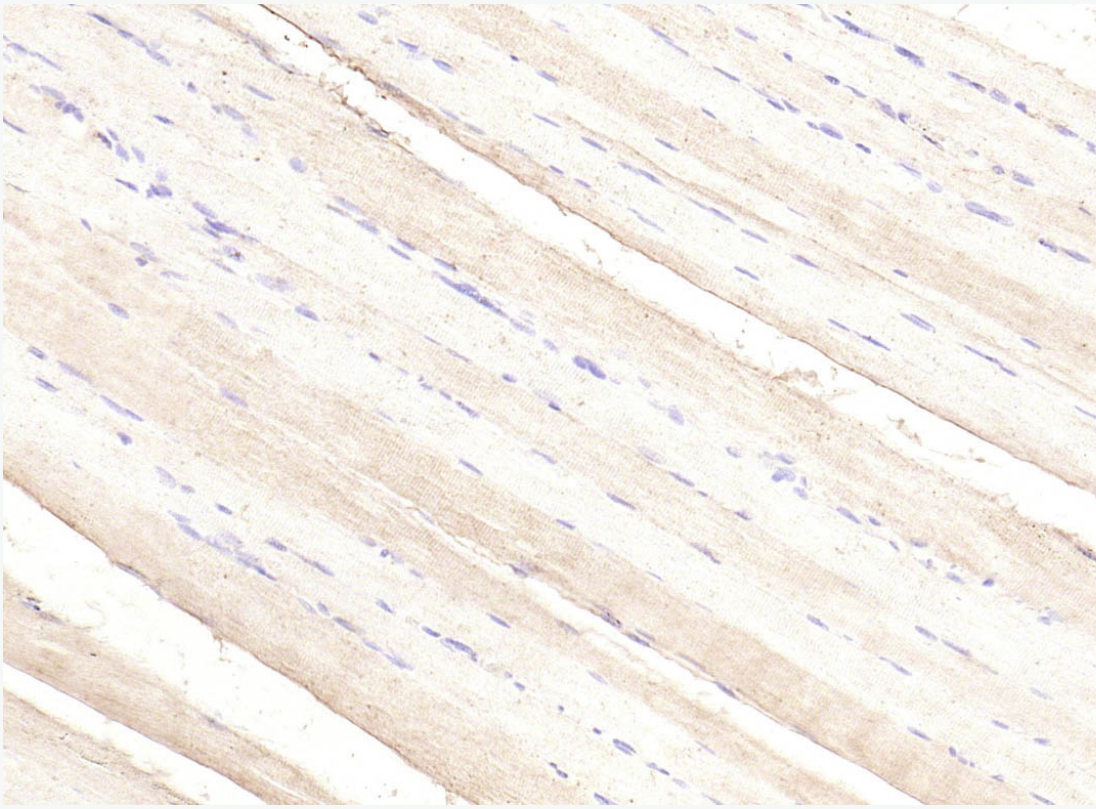

Paraformaldehyde-fixed, paraffin embedded (rat skeletal muscle); Antigen retrieval by boiling citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 2 Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PI 3 Kinase Polyclonal Antibody, Unconjugated (SL0128R) at 1:200 overnight at 4°C, followed by operat according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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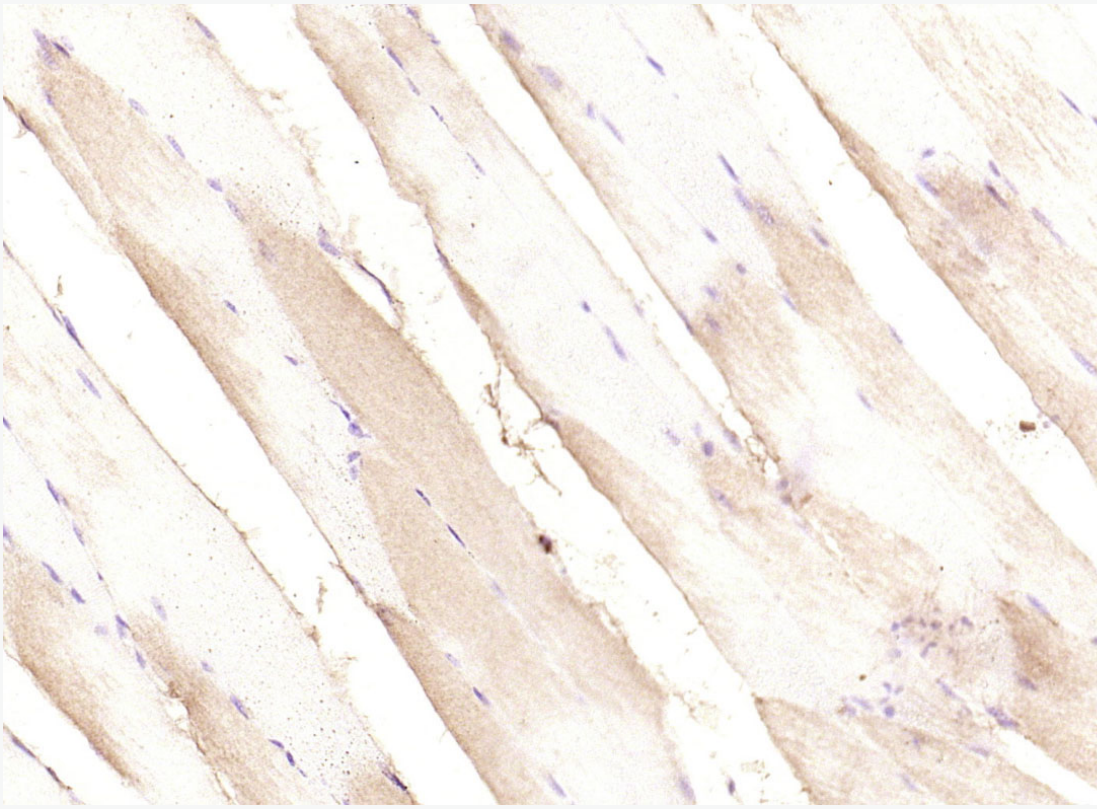

Paraformaldehyde-fixed, paraffin embedded (mouse skeletal muscle); Antigen retrieval by bo
sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen perox
minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (
p85 alpha) Polyclonal Antibody, Unconjugated (SL0128R) at 1:200 overnight at 4°C, followe
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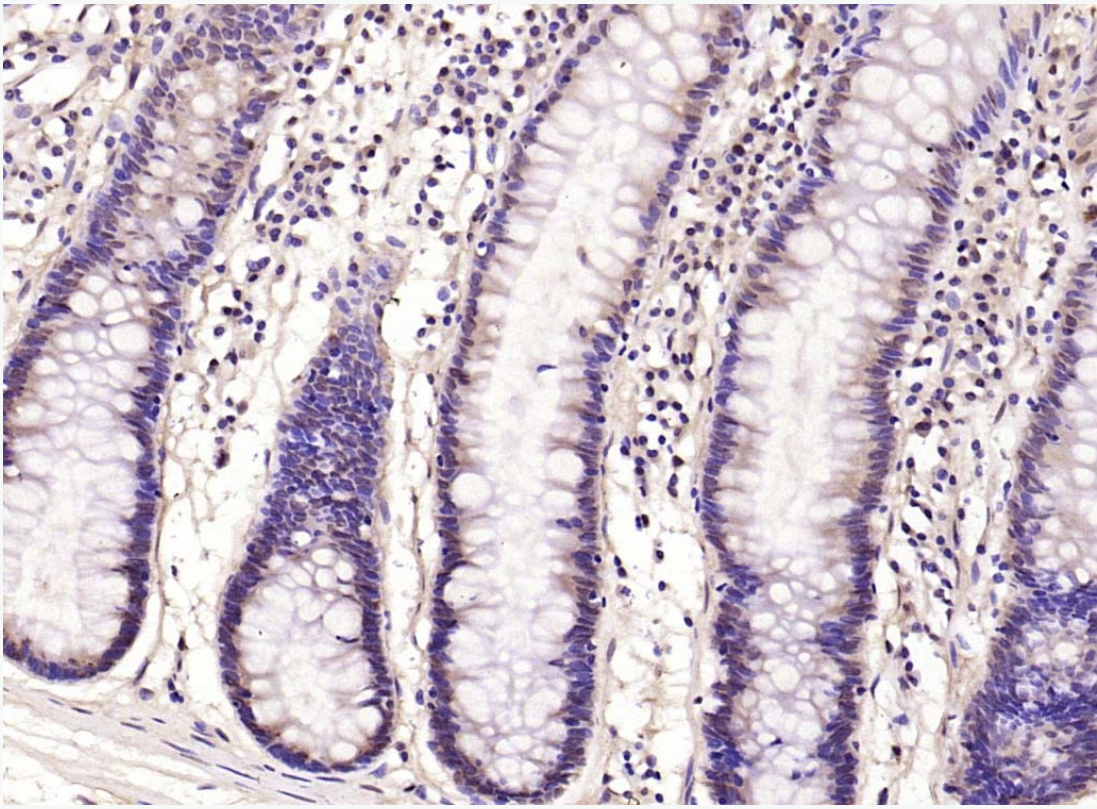

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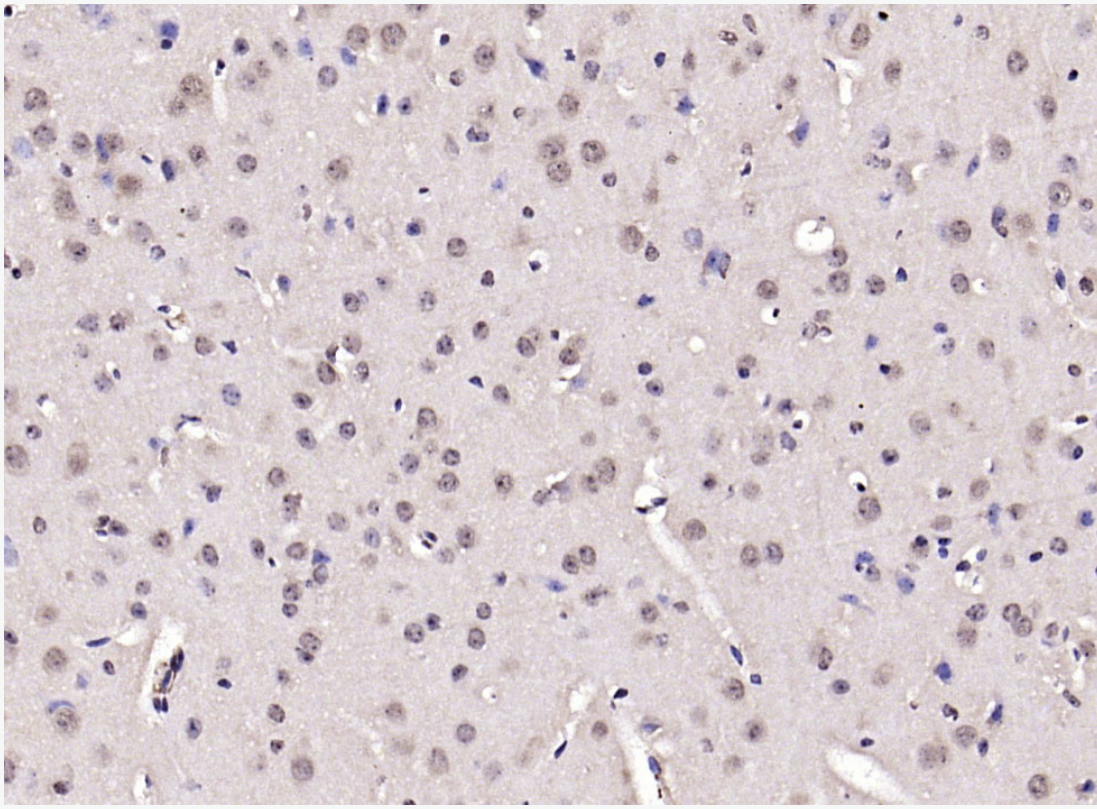

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in soc
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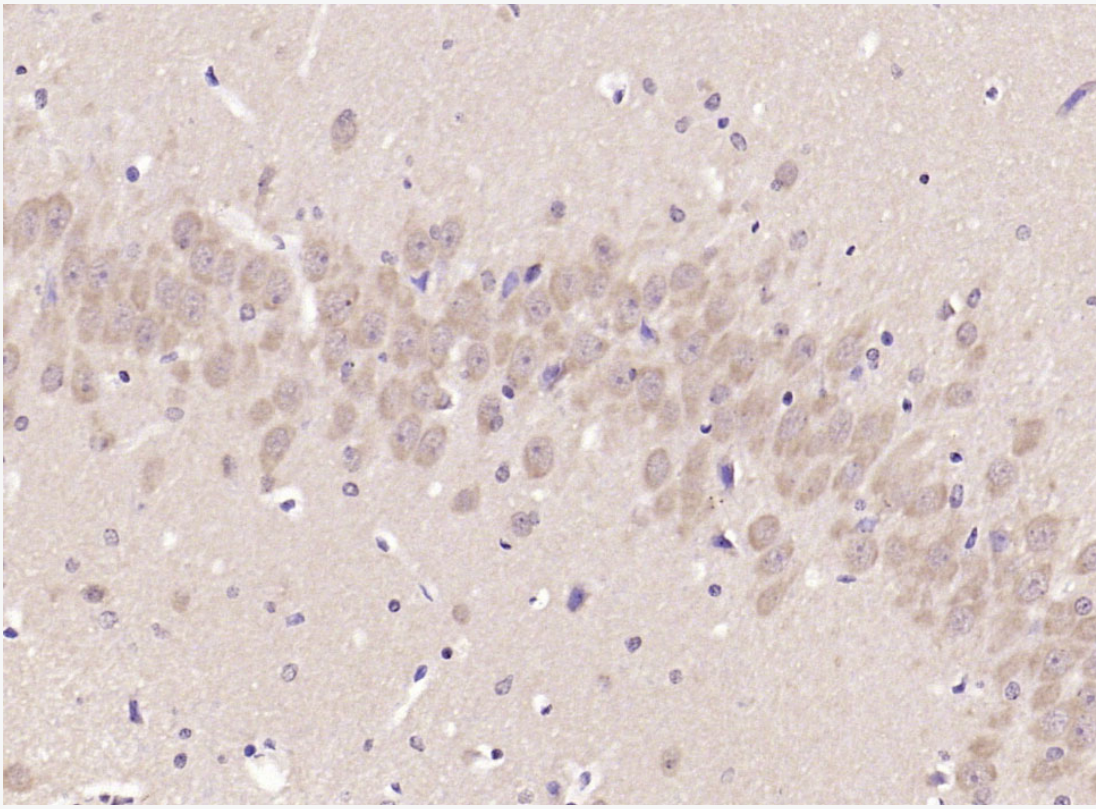

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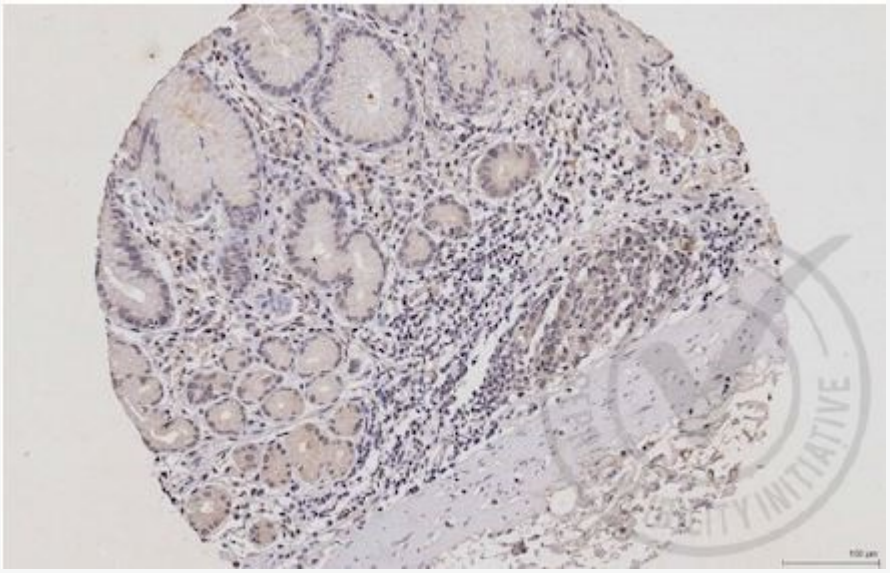
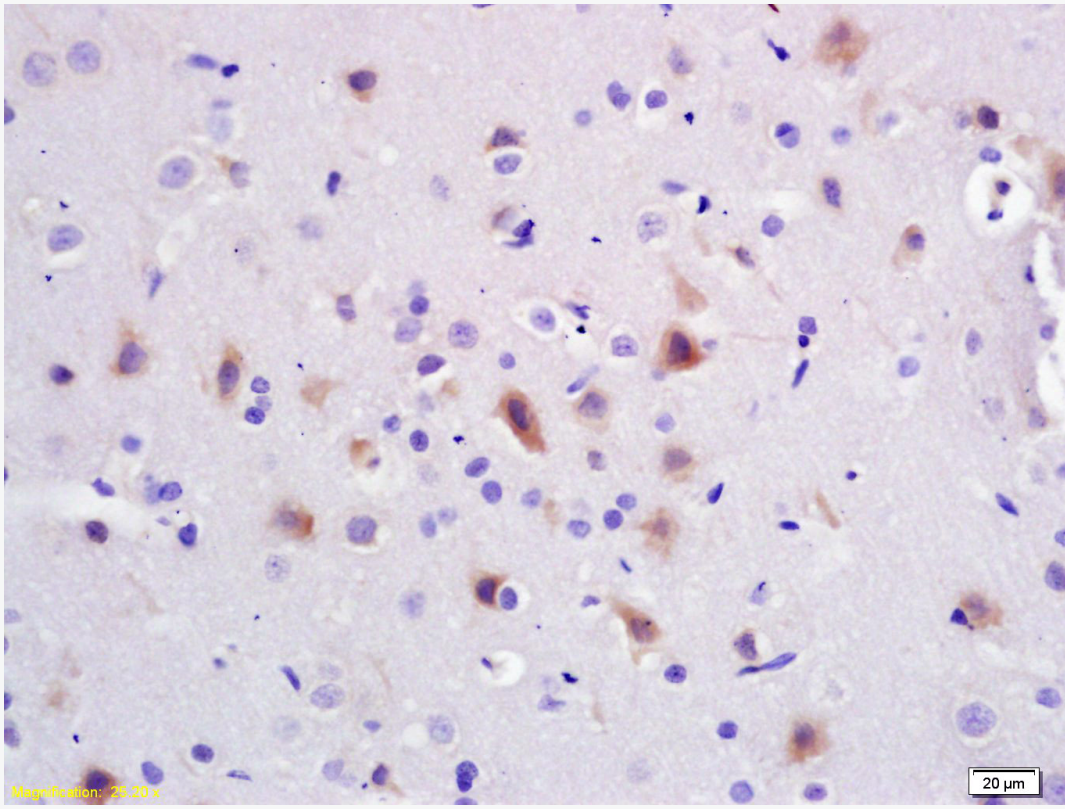


Images provided the Independent Validation Program (badge number 029650)Formalin-fixed a
embedded human stomach labeled with Rabbit Anti-PI3 kinase p85 alpha subunit Polyclonal A
(SL0128R) at 1:250 overnight at room temperature followed by conjugation to secondary anti



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous

by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ fo

Incubation: Anti-PI3K/PI3 kinase p85 alpha subunit Polyclonal Antibody, Unconjugated(SL0

1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DA

staining

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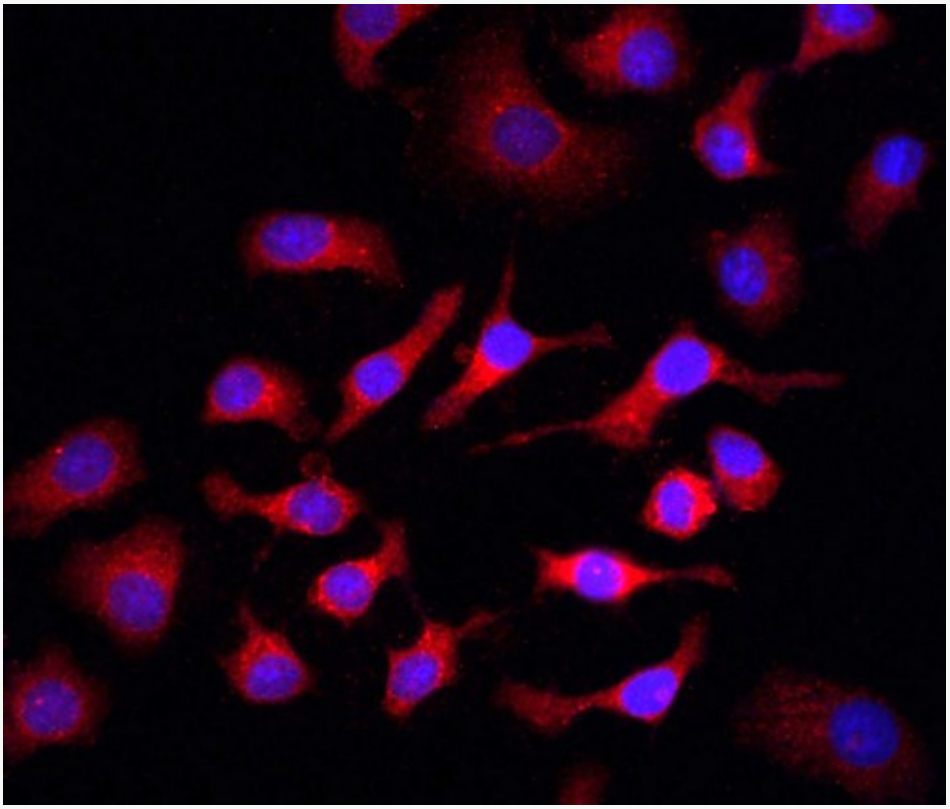

Tissue/cell: HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 2

Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (1

polyclonal Antibody, Unconjugated (SL0128R) 1:100, 90 minutes at 37°C; followed by a FIT

conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) w

stain the cell nuclei.

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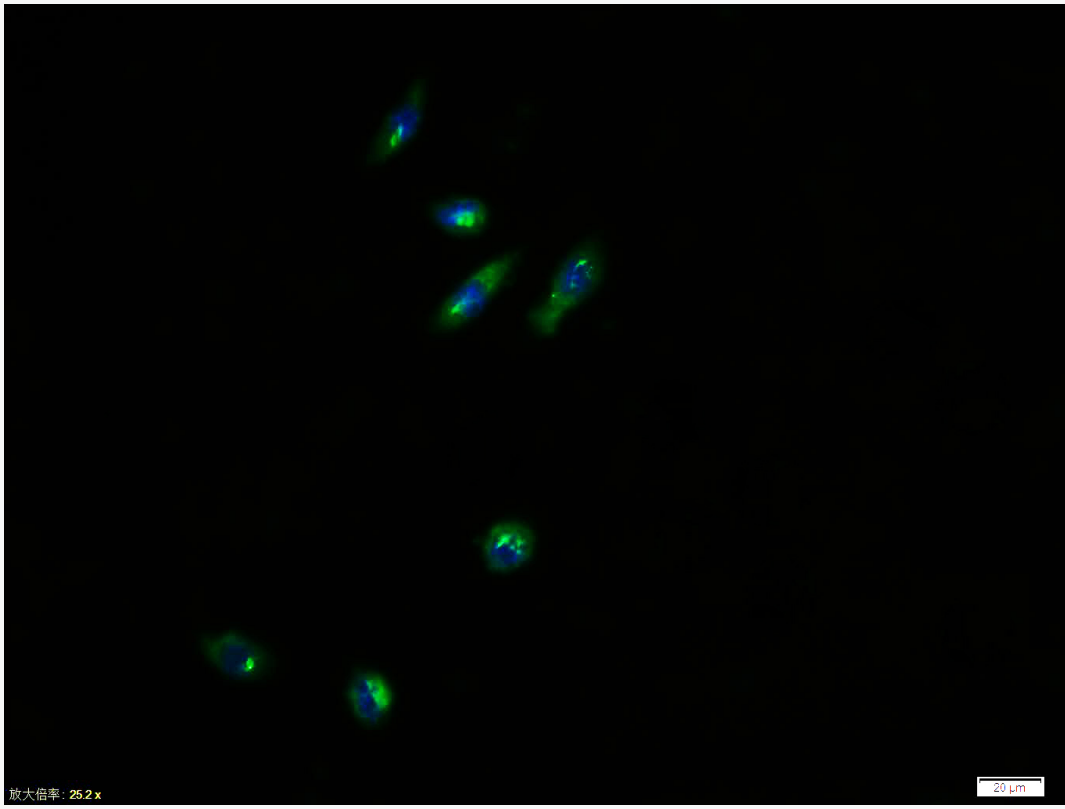


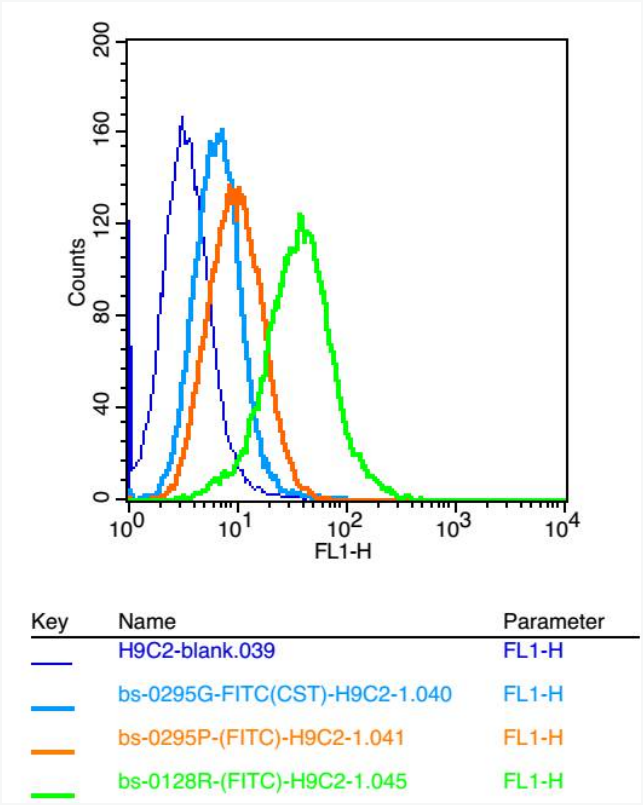
Tissue/cell: NIH/3T3 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for

Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (I

p85 alpha) polyclonal Antibody, Unconjugated (SL0128R) 1:100, 90 minutes at 37°C; followe

FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04

used to stain the cell nuclei.



Positive control: H9C2(2% Paraformaldehyde-fixed)

Isotype Control Antibody

Antibody: Rabbit IgG; Dilution: 1µg in 100 µl 1 X PBS containing 0.5% BSA

Secondary Antibody

Antibody: Goat anti-rabbit IgG-FITC; Dilution: 1:200 in 1 X PBS containing 0.5% BSA

Primary Antibody

Supplier catalog number: SL1297R; Dilution: 1µg in 100 µl 1X PBS containing 0.5% BSA