

## PI 3 kinase p85/p55 (phospho Tyr467/199) Polyclonal Antibody

Catalog No: YP0224

**Reactivity:** Human; Mouse; Rat; Monkey; Pig

**Applications:** WB;IHC;IF;ELISA

**Target:** PI3 kinase p85/p55

**Fields:** >>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 pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>Pl3K-Akt signaling pathway;>>AMPK signaling pathway;>>Apoptosis;>>Longevity regulating pathway;>>Longevity

regulating pathway - multiple species;>>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 mediated cytotoxicity;>>T cell receptor signaling

pathway;>

Gene Name: PIK3R1/PIK3R3

**Protein Name:** Phosphatidylinositol 3-kinase regulatory subunit alpha/gamma

Human Gene Id: 5295

Human Swiss Prot P27986/Q92569

No:

Mouse Gene ld: 18708/18710

**Rat Gene Id:** 25513/60664

**Rat Swiss Prot No:** Q63787/Q63789

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

PI3-kinase p85-alpha/gamma around the phosphorylation site of Tyr467/199. AA



range:436-485

**Specificity:** Phospho-PI 3-kinase p85/p55 (Y467/199) Polyclonal Antibody detects

endogenous levels of PI 3-kinase p85/p55 protein only when phosphorylated at

Y467/199.

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

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. 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: 55kD,85kD

Cell Pathway: Regulates Angiogenesis; Regulation\_Microtubule; Regulation of Actin

Dynamics; SAPK\_JNK; Stem cell pathway; Insulin Receptor; ErbB/HER; AMPK;

mTOR; B Cell Receptor; Adherens Junction

**Background:** Phosphatidylinositol 3-kinase phosphorylates the inositol ring of

phosphatidylinositol at the 3-prime position. The enzyme comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. This gene encodes the 85 kD regulatory subunit. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in this gene has been associated with insulin resistance. Alternative splicing of this gene results in four transcript variants encoding different isoforms. [provided by RefSeq, Jun

2011],

**Function:** disease:Defects in PIK3R1 are a cause of severe insulin resistance.,domain:The

SH3 domain mediates the binding to CBLB, and to HIV-1 Nef., function: Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, 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., PTM: Polyubiquitinated in T-cells

by CBLB; which does not promote proteasomal degradation but impairs

association with CD28 and CD3Z upon T-cell activation., similarity: Belongs to the

PI3K p85 subunit family., similarity: Contains 1 Rho-GAP

domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 2 SH2 domains.,subunit:Heterodimer of a p110 (catalytic) and a p85 (regulatory)



subunits. Interacts with phosphorylated TOM1L1. Interacts with phosphorylat

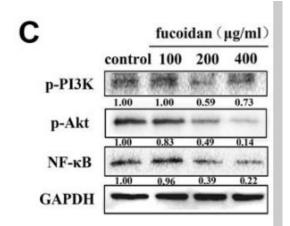
Subcellular Location:

nucleus,cytoplasm,cis-Golgi network,cytosol,plasma membrane,cell-cell junction,phosphatidylinositol 3-kinase complex, phosphatidylinositol 3-kinase complex, class IA,membrane,perinuclear endoplasmic reticulum membrane,

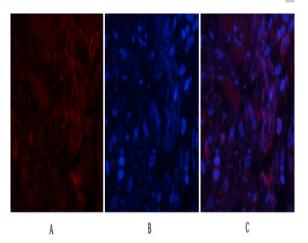
**Expression:** 

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

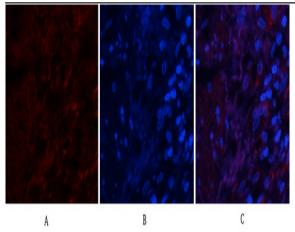
## **Products Images**



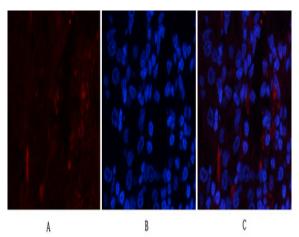
Yang, Yazong, et al. "Fucoidan inhibits lymphangiogenesis by downregulating the expression of VEGFR3 and PROX1 in human lymphatic endothelial cells." Oncotarget 7.25 (2016): 38025.



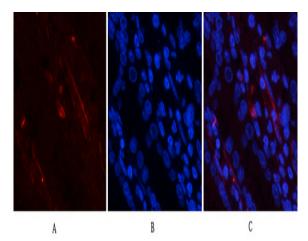
Immunofluorescence analysis of human-lung tissue. 1,PI 3-kinase p85/p55 (phospho Tyr467/199) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



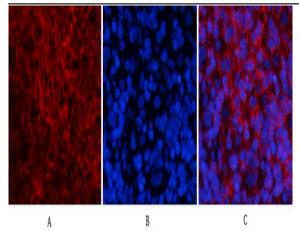
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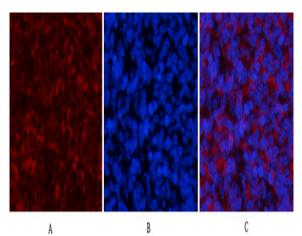
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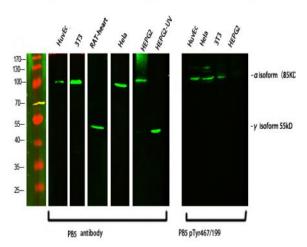
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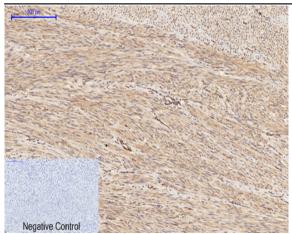
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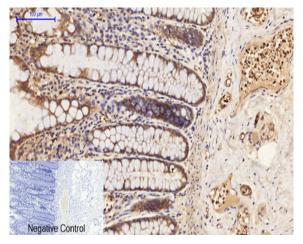
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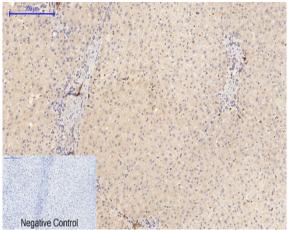
Western Blot analysis of various cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody:Goat Antirabbit IgG IRDye 800( diluted at 1:5000, 25°C, 1 hour)



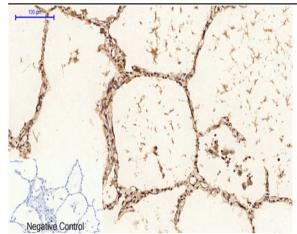
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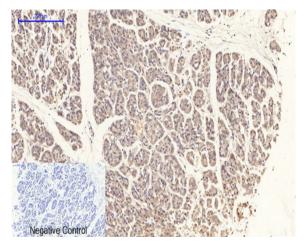
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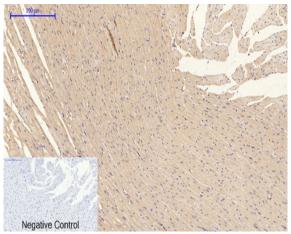
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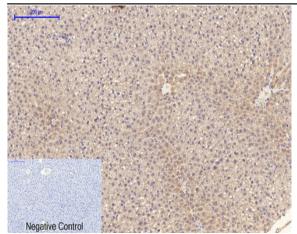
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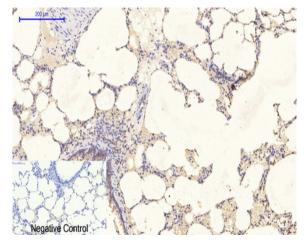
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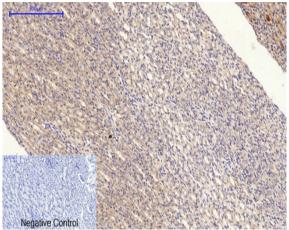
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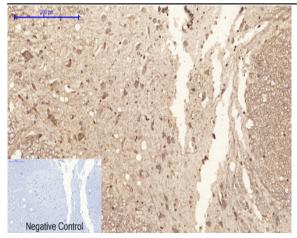
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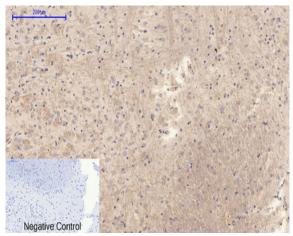
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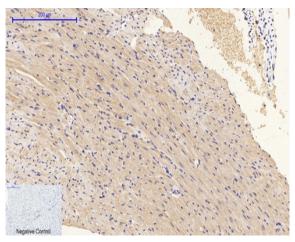
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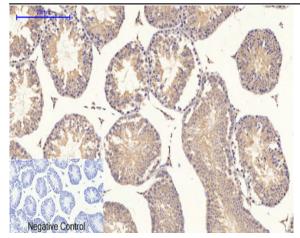
Immunohistochemical analysis of paraffin-embedded Rat-spinal-cord tissue. 1,PI 3-kinase p85/p55 (phospho Tyr467/199)
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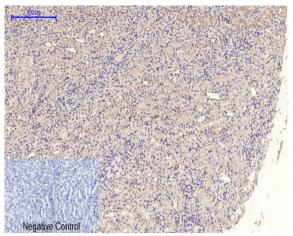
Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,PI 3-kinase p85/p55 (phospho Tyr467/199) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



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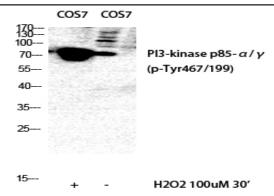
Immunohistochemical analysis of paraffin-embedded Mouse-testis tissue. 1,PI 3-kinase p85/p55 (phospho Tyr467/199) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



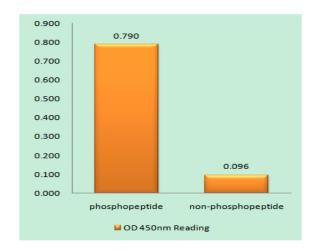
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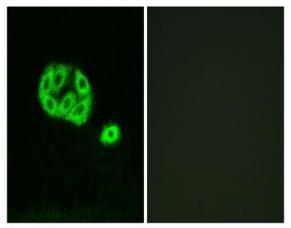
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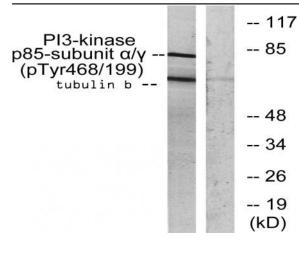
Western Blot analysis of COS7 cells using Phospho-PI 3-kinase p85/p55 (Y467/199) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PI3-kinase p85-alpha/gamma (Phospho-Tyr467/199) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using PI3-kinase p85-alpha/gamma (Phospho-Tyr467/199) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells treated with H2O2 100uM 30', using PI3-kinase p85-alpha/gamma (Phospho-Tyr467/199) Antibody. The lane on the right is blocked with the phospho peptide.