PI 3 Kinase p85 alpha Rabbit mAb

Catalog No: #48848

Package Size: #48848-1 50ul #48848-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	PI 3 Kinase p85 alpha Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SU04-07
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	Synthetic peptide within C-terminal human PI 3 Kinase p85 alpha.
Conjugates	Unconjugated
Other Names	GRB1 antibody p85 alpha antibody p85 antibody P85A_HUMAN antibody Phosphatidylinositol 3 kinase associated p 85 alpha antibody Phosphatidylinositol 3 kinase regulatory 1 antibody Phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 1 (p85 alpha) antibody Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha antibody Phosphatidylinositol 3-kinase regulatory subunit alpha antibody Phosphoinositide 3 kinase, regulatory subunit 1 (alpha) antibody PI3 kinase p85 subunit alpha antibody PI3-kinase regulatory subunit alpha antibody PI3-kinase subunit p85-alpha antibody PI3K antibody PI3K regulatory subunit alpha antibody Pik3r1 antibody PtdIns 3 kinase p85 alpha antibody PtdIns-3-kinase regulatory subunit alpha antibody PtdIns-3-kinase regulatory subunit p85-alpha antibody
Accession No.	Swiss-Prot#:P27986
Calculated MW	84 kDa
SDS-PAGE MW	84 kDa
Concentration	1 mg/mL
Formulation	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

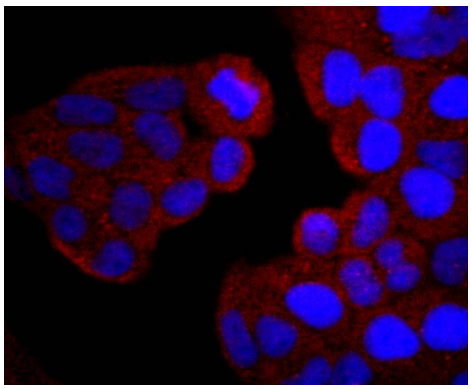
WB: 1:1,000-1:2,000

IHC: 1:50-1:200

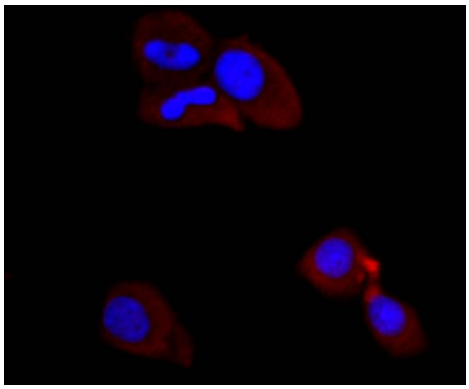
ICC: 1:50-1:200

FC: 1:50-1:100

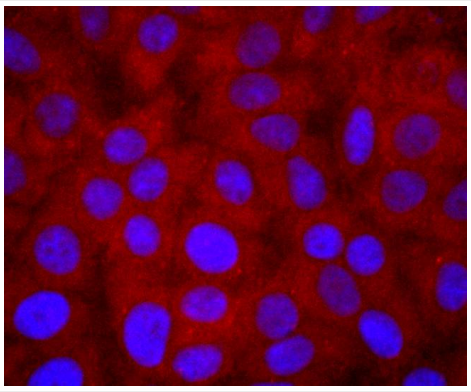
Images



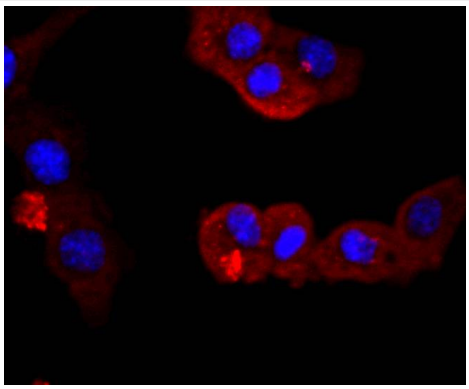
ICC staining PI 3 Kinase p85 alpha in Hela cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



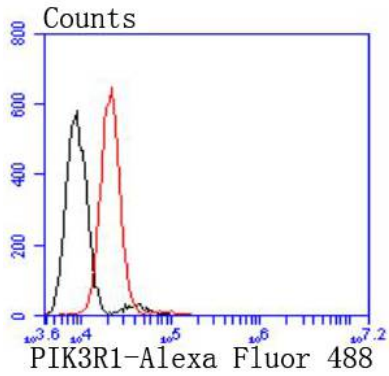
ICC staining PI 3 Kinase p85 alpha in MCF-7 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



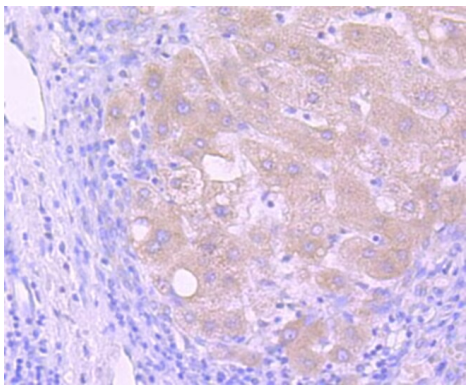
ICC staining PI 3 Kinase p85 alpha in HepG2 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



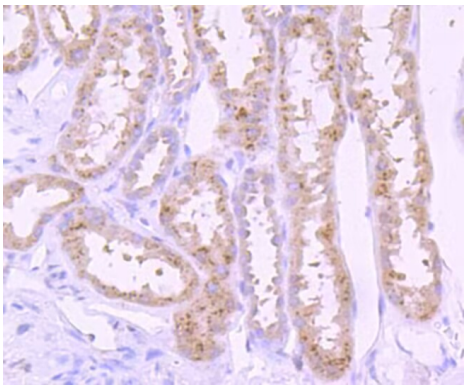
ICC staining PI 3 Kinase p85 alpha in NIH/3T3 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



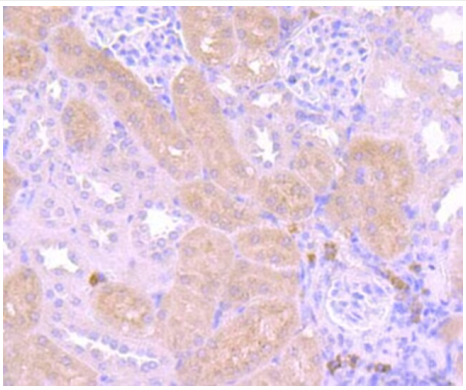
Flow cytometric analysis of HepG2 cells with PI 3 Kinase p85 alpha antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody



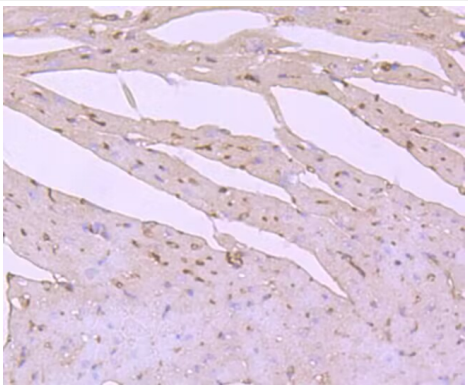
Immunohistochemical analysis of paraffin-embedded human liver carcinoma tissue using anti-PI 3 Kinase p85 alpha antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody oO 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



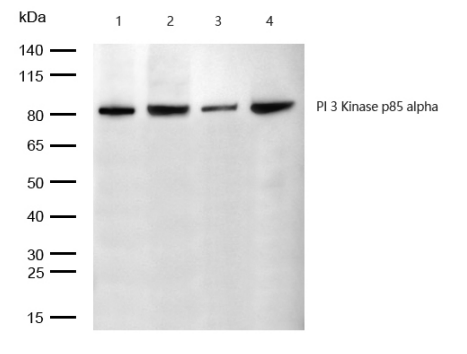
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-PI 3 Kinase p85 alpha antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-PI 3 Kinase p85 alpha antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-PI 3 Kinase p85 alpha antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



All lanes: PI 3 Kinase p85 alpha Rabbit mAb at 1/1k dilution

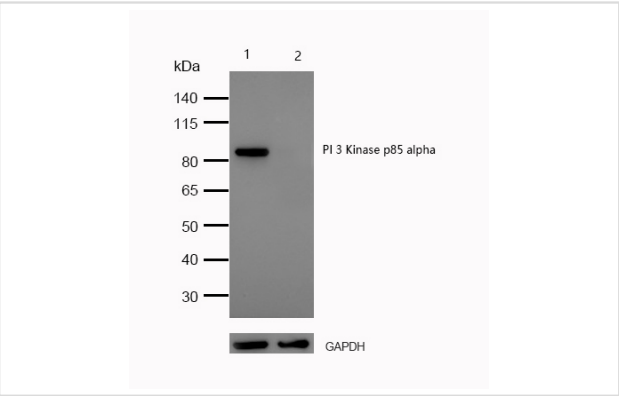
Lane 1 : 293 whole cell lysates
Lane 2 : HepG2 whole cell lysatesLane 3 : Mouse brain lysatesLane 4 : Rat brain lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution

Predicted band size: 84 kDa
Observed band size: 84 kDa

Exposure time: 4 seconds



All lanes :PI 3 Kinase p85 alpha Rabbit mAb at 1/1k dilution

Lane 1 : Wild-type A549 cell lysate
Lane 2 : PI 3 Kinase p85 alpha knockdown A549 cell lysate

Lysates/proteins at 20 µg per lane.

Background

Phosphatidylinositol 3-kinase (PI 3-kinase) phosphorylates the 3' OH position of the inositol ring of inositol lipids and is composed of p85 and p110 subunits. PI 3-kinase p85 lacks PI 3-kinase activity and acts as an adapter, coupling p110 to activated protein tyrosine kinase. Two forms of p85 have been described (p85α and p85β), each possessing one SH3 and two SH2 domains. PI 3-kinase p85α, also known as GRB1, phosphatidylinositol 3-kinase regulatory 1 or p85, is a 724 amino acid protein that exists as four alternatively spliced isoforms. Involved in insulin metabolism, defects in the PI 3-kinase p85α gene have been linked to insulin resistance. PI 3-kinase p85α is polyubiquitinated in T-cells by Cbl-b, and has multiple phosphorylated amino acid residues, including a phosphorylated tyrosine residue at position 467.

References

1. Yan LX et al. PIK3R1 targeting by miR-21 suppresses tumor cell migration and invasion by reducing PI3K/AKT signaling and reversing EMT, and predicts clinical outcome of breast cancer. Int J Oncol 48:471-84 (2016).
2. Hu J et al. Filamin B regulates chondrocyte proliferation and differentiation through Cdk1 signaling. PLoS One 9:e89352 (2014).

Published Papers

el at., Effect of Fushengong Decoction on PTEN/PI3K/AKT/NF-KB Pathway in Rats With Chronic Renal Failure via Dual-Dimension Network Pharmacology Strategy.In Front Pharmacol on 2022 Mar 15 by Hongyu Luo, Munan Wang,et al..PMID: 35370667, , (2022)

PMID:35370667

el at., Effect of Fushengong Decoction on PTEN/PI3K/AKT/NF-κB Pathway in Rats With Chronic Renal Failure via Dual-Dimension Network Pharmacology Strategy. In Front Pharmacol on 2022 Mar 15 by Hongyu Luo, Munan Wang, et al..PMID: 35370667, , (2022)

PMID:35370667

Qiaoli Chen;Quanxiang Hao;Yanping Yang;Limei Li;Danping Li;Ran Zhao;Wanqi Wei;Lixian Deng;Jiaming Su;Ziyuan Liang;Shiyue Tang;Yaomin Lu;Yushan Liang;Zhe Zhang;Xiaoying Zhou;Xue Xiao;Ping Li;Yi Huang;Weilin Zhao el at., Carboxylesterase 4A Inhibits the Malignant Biological Behavior of Nasopharyngeal Carcinoma via the PI3K/AKT Pathway., , (2025)

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Wu Yingchao, Chen Liushan, Pi Dajin, Cui Jiaqi, Liang Yuqi, Wu Peng, Ouyang Mingzi, Zuo Qian el at., Saikosaponin A induces cellular senescence in triple-negative breast cancer by inhibiting the PI3K/Akt signalling pathway, Frontiers in pharmacology, (2025)

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Luo Hongyu, Yang Shuxian, Deng Peng, Peng Yongbo, Chen Zhiwei, Yang Congwen, Wang Meng, Qin Renjie, Yuan Lin, Chen Xin, Wang Dandan, Huang Xuekuan, Wang Jianwei el at., Network pharmacology combined with transcriptomics reveals that formononetin, a biologically component of Astragalus membranaceus (Fisch.) Bunge, inhibits theB β ¦, Journal of ethnopharmacology, (2025)

PMID:39510423

Note: This product is for in vitro research use only and is not intended for use in humans or animals.