

PI3 Kinase p85 alpha Polyclonal Antibody

Catalog No: #48184



Package Size: #48184-1 50ul #48184-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

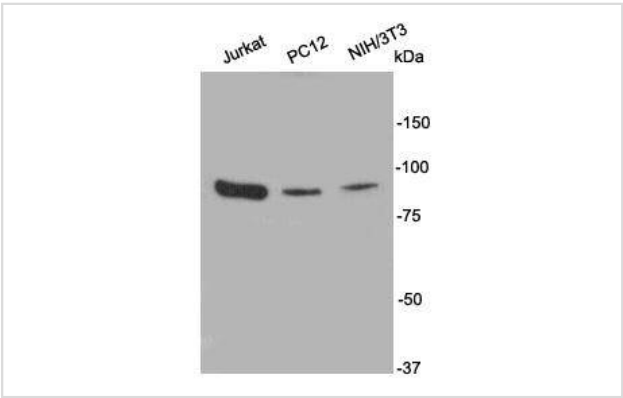
Description

|                       |   |
|-----------------------|---|
| Product Name          | PI3 Kinase p85 alpha Polyclonal Antibody  |
| Host Species          | Rabbit  |
| Clonality             | Polyclonal  |
| Purification          | Immunogen affinity purified.  |
| Applications          | WB, ICC, IHC, FC  |
| Species Reactivity    | Human;Mouse;Rat   |
| Immunogen Description | Synthetic peptide within human PI3-kinase p85 subunit 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 p86-alpha antibody |
| Accession No.         | Swiss-Prot#:P27986  |
| Calculated MW         | 85kDa   |
| SDS-PAGE MW           | 85kDa   |
| Formulation           | 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.  |
| Storage               | Store at -20°C  |

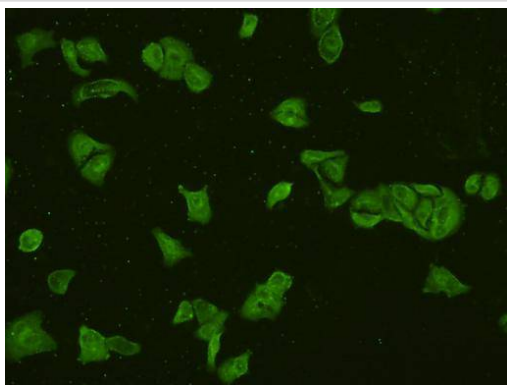
Application Details

WB 1:500-2000; IHC 1:50-200; ICC 1:50-200; FC 1:50-100

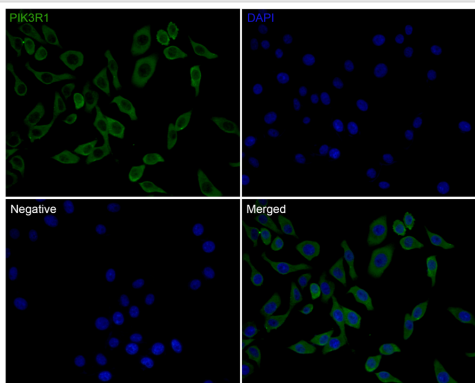
Images



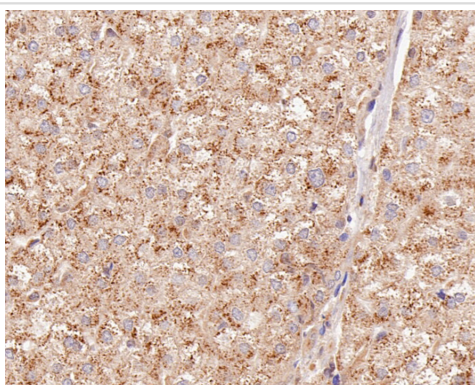
Western blot analysis on cell lysates using anti- PI3-kinase p85 subunit alpha rabbit polyclonal antibodies.



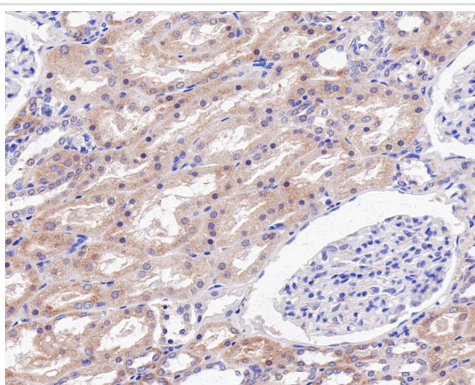
ICC staining PI3-kinase p85 subunit alpha in Hela cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



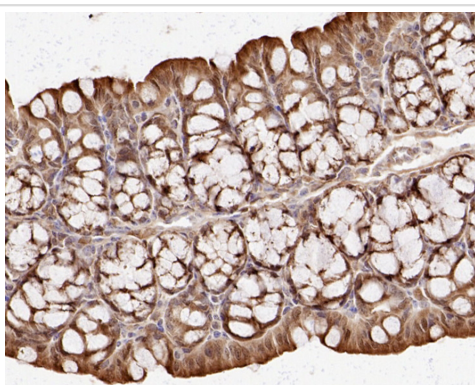
Immunocytochemistry analysis of HepG2 cells labeling PI 3 Kinase p85 alpha with Rabbit anti-PI 3 Kinase p85 alpha antibody at 1/200 dilution.



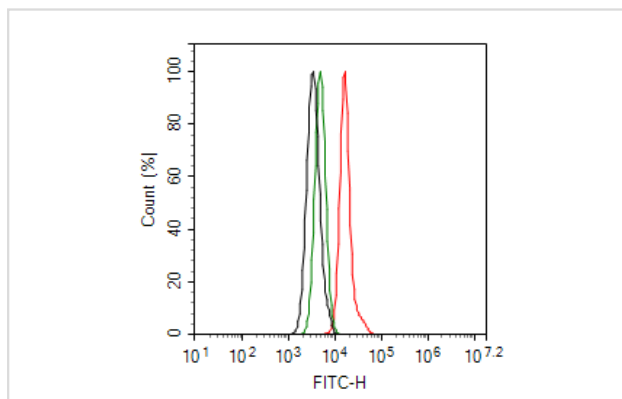
Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-PI 3 Kinase p85 alpha antibody at 1/500 dilution.



Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-PI 3 Kinase p85 alpha antibody at 1/500 dilution.



Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Rabbit anti-PI 3 Kinase p85 alpha antibody at 1/200 dilution.



Flow cytometric analysis of Hela cells labeling PI 3 Kinase p85 alpha.

## Background

Phosphatidylinositol 3-kinase regulatory subunit alpha is an enzyme that in humans is encoded by the PIK3R1 gene. 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 three transcript variants encoding different isoforms. Mutations in PIK3R1 are implicated in cases of breast cancer. Mutations in PIK3R1 are associated to SHORT syndrome.

## References

- 1."Natural variants of human p85 alpha phosphoinositide 3-kinase in severe insulin resistance: a novel variant with impaired insulin-stimulated lipid kinase activity." Baynes K.C.R., Beeton C.A., Panayotou G., Stein R., Soos M., Hansen T., Simpson H., O'Rahilly S., Shepherd P.R., Whitehead J.P. Diabetologia 43:321-331(2000)
- 2."The structure of a human p110alpha/p85alpha complex elucidates the effects of oncogenic PI3Kalpha mutations." Huang C.-H., Mandelker D., Schmidt-Kittler O., Samuels Y., Velculescu V.E., Kinzler K.W., Vogelstein B., Gabelli S.B., Amzel L.M. Science 318:1744-1748(2007)

## Published Papers

et al., Grape seed proanthocyanidin extract ameliorates cisplatin-induced testicular apoptosis via PI3K/Akt/mTOR and endoplasmic reticulum stress pathways in rats. In J Food Biochem on 2021 Jun 21 by Xuhong Chang, Minmin Tian, et al..PMID:34152018, , (2021)

[PMID:34152018](#)

et al., Penetrating Macrophage-Based Nanoformulation for Periodontitis Treatment. In ACS Nano on 2022 Nov 22 by Na Yan, Junchao Xu, et al..PMID:36288552, , (2022)

[PMID:36288552](#)

et al., CD155 Cooperates with PD-1/PD-L1 to Promote Proliferation of Esophageal Squamous Cancer Cells via PI3K/Akt and MAPK Signaling Pathways. In Cancers (Basel) on 2022 Nov 15 by Xiyang Tan, Jie Yang, et al..PMID:36428703, , (2022)

[PMID:36428703](#)

et al., Histone Methyltransferase KMT2B Promotes Metastasis and Angiogenesis of Cervical Cancer by Upregulating EGF Expression In Int J Biol Sci On 2023 Jan 15 by Dan Zhao, Hui Yuan et al..PMID:36594087, , (2023)

[PMID:36594087](#)

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