Rabbit Polyclonal Antibody Catalog #: APRab05245



Summary

Production Name PI 3-kinase p85α (phospho Tyr607) Rabbit Polyclonal Antibody

Description Rabbit Polyclonal Antibody

Host Rabbit

Application IF,WB,IHC,ELISA

Reactivity Human, Mouse, Rat, Chicken (tested by our customer)

Performance

Conjugation Unconjugated

Modification Phospho Antibody

Isotype IgG

Clonality Polyclonal Form Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw Storage

cycles.

Buffer Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.

Purification Affinity purification

Immunogen

Gene Name PIK3R1

PIK3R1; GRB1; Phosphatidylinositol 3-kinase regulatory subunit alpha; PI3-kinase

regulatory subunit alpha; PI3K regulatory subunit alpha; PtdIns-3-kinase regulatory Alternative Names

subunit alpha; Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha; PI3-

kinase subunit p85-alpha; PtdIns-3-kinase regulatory subunit p85-alpha

Gene ID 5295.0

P27986.The antiserum was produced against synthesized peptide derived from human **SwissProt ID**

PI3-kinase p85-alpha around the phosphorylation site of Tyr607. AA range:573-622

Application

Dilution Ratio IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000. Not yet tested in other

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applications.

Molecular Weight 80kD

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], 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 phosphorylated LIME1 upon TCR and/or BCR activation. Interacts with SOCS7. Interacts with RUFY3 (By similarity). Interacts with phosphorylated LAT, LAX1 and TRAT1 upon TCR activation. Interacts with CBLB. Interacts with HIV-1 Nef to activate the Nef associated p21-activated kinase (PAK). This interaction depends on the C-terminus of both proteins and leads to increased production of HIV. Interacts with HCV NS5A. The SH2 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. Interacts with IRS1 and phosphorylated IRS4, as well as with NISCH and HCST.,tissue specificity: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).,

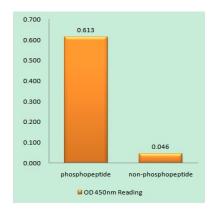
Research Area

Regulates Angiogenesis; Regulation_Microtubule; Regulation of Actin Dynamics; SAPK_JNK; Stem cell pathway; Insulin Receptor; ErbB/HER; AMPK; mTOR; B Cell Receptor; Adherens_Junction

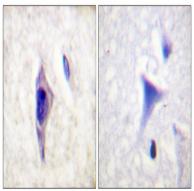
Image Data

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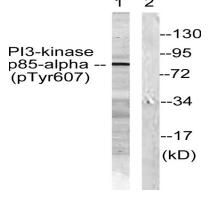


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using PI3-kinase p85-alpha (Phospho-Tyr607) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using PI3-kinase p85-alpha (Phospho-Tyr607)

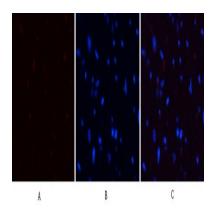
Antibody. The picture on the right is blocked with the phospho peptide.



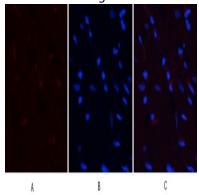
Western blot analysis of lysates from rat kidney, using PI3-kinase p85-alpha (Phospho-Tyr607) Antibody. The lane on the right is blocked with the phospho peptide.

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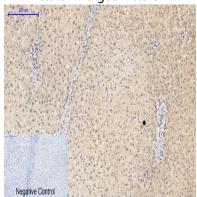




Immunofluorescence analysis of rat-heart tissue. 1,PI 3-kinase p85α (phospho Tyr607) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



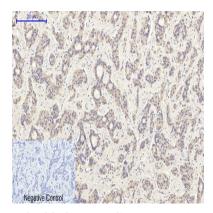
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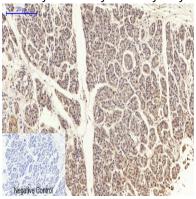
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,PI 3-kinase p85 α (phospho Tyr607) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

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Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,PI 3-kinase p85 α (phospho Tyr607) 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.



Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,PI 3-kinase p85 α (phospho Tyr607) 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.



Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1,PI 3-kinase p85 α (phospho Tyr607) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) .

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3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

Note

For research use only.