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PI3 Kinase P85α Monoclonal Antibody(3B7)

Catalog # AP63635

Product Information

Application	WB, IHC-P
Primary Accession	P27986
Reactivity	Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	83598

Additional Information

Gene ID	5295
Other Names	PIK3R1; GRB1; Phosphatidylinositol 3-kinase regulatory subunit alpha; PI3-kinase regulatory subunit alpha; PI3K regulatory subunit alpha; PtdIns-3-kinase regulatory subunit alpha; Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha; PI3-kinase subunit p85-alpha; PtdIns-3-kinase regulatory subunit p85-alpha
Dilution	WB~~WB 1:1000-2000, IHC 1:100-200 IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

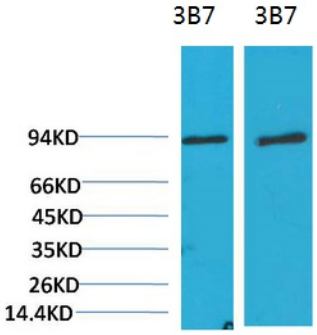
Name	PIK3R1
Synonyms	GRB1
Function	Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling (PubMed:17626883, PubMed:19805105, PubMed:7518429). Modulates the cellular response to ER stress by promoting nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (PubMed:20348923).
Tissue Location	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)

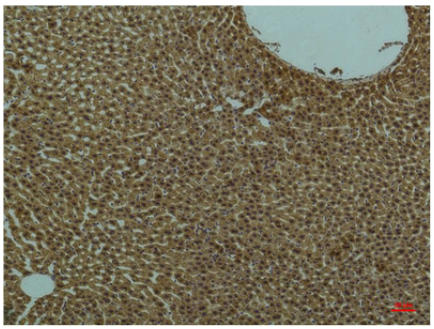
Background

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. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling (PubMed:17626883, PubMed:19805105, PubMed:7518429). Modulates the cellular response to ER stress by promoting nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (PubMed:20348923).

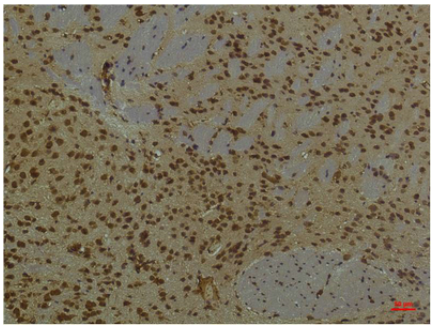
Images



Western blot analysis of 1)3T3, 2) Rat LiverTissue with PI3 Kinase P85α Mouse mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Rat Liver Tissue using PI3 Kinase P85 α Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Mouse BrainTissue using PI3 Kinase P85 α Mouse mAb diluted at 1:200.