

PIK3R1 / p85 Alpha Antibody (clone 6G10)
Mouse Monoclonal Antibody
Catalog # ALS15722

Specification

PIK3R1 / p85 Alpha Antibody (clone 6G10) - Product Information

Application	IHC, IF
Primary Accession	P27986
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	84kDa KDa

PIK3R1 / p85 Alpha Antibody (clone 6G10) - Additional Information

Gene ID 5295

Other Names

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, PIK3R1, GRB1

Target/Specificity

Human PIK3R1 / p85 Alpha

Reconstitution & Storage

For long term storage -20°C is recommended.

Precautions

PIK3R1 / p85 Alpha Antibody (clone 6G10) is for research use only and not for use in diagnostic or therapeutic procedures.

PIK3R1 / p85 Alpha Antibody (clone 6G10) - 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](http://www.uniprot.org/citations/20348923)).

Tissue Location

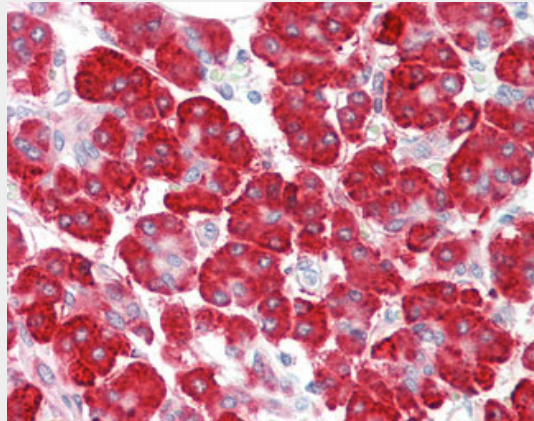
Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level)

PIK3R1 / p85 Alpha Antibody (clone 6G10) - Protocols

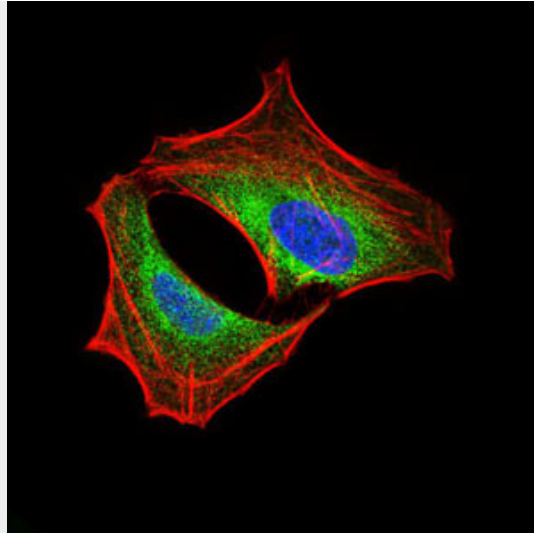
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

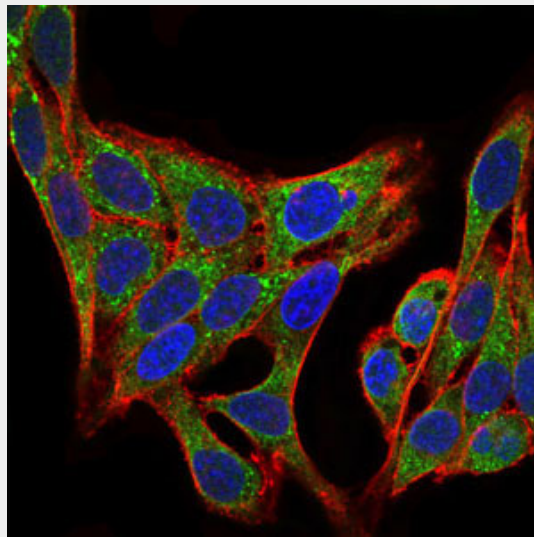
PIK3R1 / p85 Alpha Antibody (clone 6G10) - Images



Anti-PIK3R1 / p85 Alpha antibody IHC staining of human pancreas.



Immunofluorescence of HeLa cells using PIK3R1 mouse monoclonal antibody (green).



Immunofluorescence of HepG2 cells using PIK3R1 mouse monoclonal antibody (green).

PIK3R1 / p85 Alpha Antibody (clone 6G10) - 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).

PIK3R1 / p85 Alpha Antibody (clone 6G10) - References

Skolnik E.Y., et al. Cell 65:83-90(1991).
Antonetti D.A., et al. Mol. Cell. Biol. 16:2195-2203(1996).
Udelhoven M., et al. Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
Ota T., et al. Nat. Genet. 36:40-45(2004).

Totoki Y., et al. Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.