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Anti-PI3K p85 alpha/p55 gamma (Phospho-Y467/199) Antibody

Catalog # AP53885

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P27986
Other Accession	Q92569
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
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; PIK3R3; Phosphatidylinositol 3-kinase regulatory subunit gamma; PI3-kinase regulatory subunit gamma; PI3K regulatory subunit gamma; PtdIns-3-kinase regulatory subunit gamma; Phosphatidylinositol 3-kinase 55 kDa regulatory subunit gamma; PI3-kinase subunit p55-gamma; PtdIns-3-kinase regulatory subunit p55-gamma; p55PIK
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding Y467/199 of human PI3K p85 alpha/p55 gamma protein. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/200 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

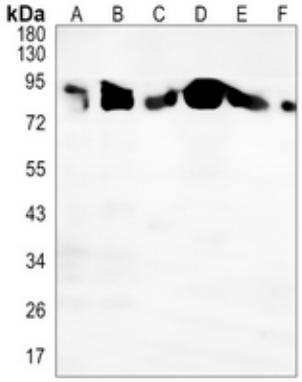
Name	PIK3R1
Synonyms	GRB1
Function	Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110

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).

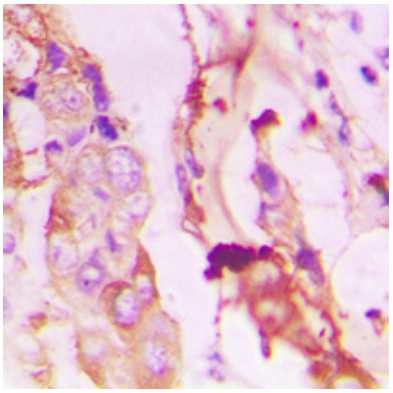
Cellular Location Cytoplasm.

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)

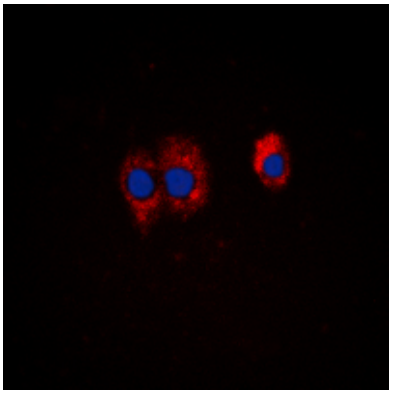
Images



Western blot analysis of PI3K p85 alpha/p55 gamma (Phospho-Y467/199) expression in Jurkat (A), MCF7 (B), mouse kidney (C), mouse muscle (D), rat kidney (E), rat muscle (F) whole cell lysates. (Predicted band size: 83; 54 kD; Observed band size: 85 kD)

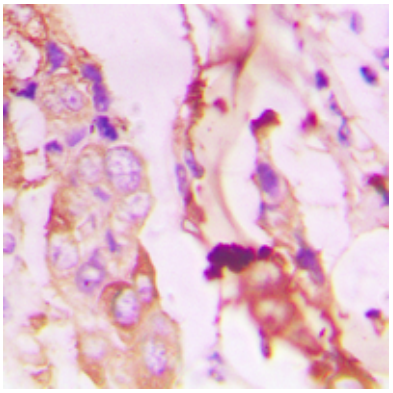


Immunohistochemical analysis of PI3K p85 alpha/p55 gamma (Phospho-Y467/199) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PI3K p85 alpha/p55 gamma (Phospho-Y467/199) staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of PI3K p85 alpha/p55



gamma (pY467/199) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.