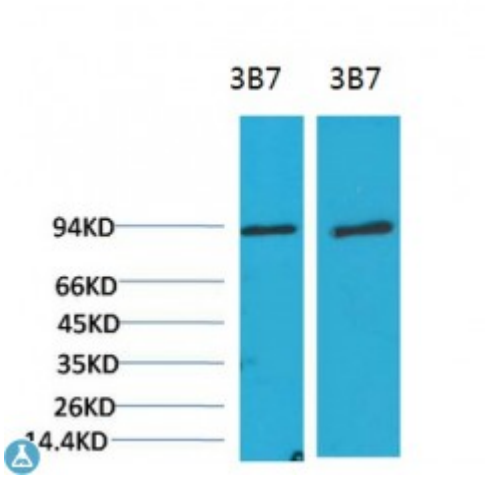
Anti-PI3 Kinase P8 alpha antibody



Description	Mouse monoclonal to PI3 Kinase P85alpha (3B7).

Model	STJ97521
Host	Mouse
Reactivity	Mouse, Rat
Applications	IHC, WB
Immunogen	Recombinant Protein
Immunogen Region	Full length protein
Gene ID	5295
Gene Symbol	PIK3R1
Dilution range	WB 1:1000-2000, IHC 1:100-200
Specificity	PI3 Kinase P85alpha Mouse Monoclonal Antibody (3B7) detects endogenous levels of PI3 Kinase P85alpha
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).
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Clone ID	3B7
Note	For Research Use Only (RUO).
Protein Name	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 P
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:8979OMIM:171833
Alternative 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 P
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 . 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 .
Sequence and Domain Family	The SH3 domain mediates the binding to CBLB, and to HIV-1 Nef.
Post-translational Modifications	Polyubiquitinated in T-cells by CBLB; which does not promote proteasomal degradation but impairs association with CD28 and CD3Z upon T-cell activation. Phosphorylated. Tyrosine phosphorylated in response to signaling by FGFR1, FGFR2, FGFR3 and FGFR4. Phosphorylated by CSF1R. Phosphorylated by ERBB4. Phosphorylated on tyrosine residues by TEK/TIE2. Dephosphorylated by PTPRJ. Phosphorylated by PIK3CA at Ser-608; phosphorylation is stimulated by insulin and PDGF. The relevance of phosphorylation by PIK3CA is however unclear . Phosphorylated in response to KIT and KITLG/SCF. Phosphorylated by FGR.