



PI3 Kinase P85 α Monoclonal Antibody(3B7)

Catalog No	YP-Ab-14242
Isotype	IgG
Reactivity	Rat;Mouse
Applications	WB;IHC;IF
Gene Name	PIK3R1
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 8
Immunogen	Recombinant Protein of PI3 Kinase P85 α
Specificity	PI3 Kinase P85 α protein detects endogenous levels of PI3 Kinase P85 α
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000, IHC 1:100-200. IF 1:50-200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	85kD
Cell Pathway	nucleus,cytoplasm,cis-Golgi network,cytosol,plasma membrane,cell-cell junction,phosphatidylinositol 3-kinase complex,phosphatidylinositol 3-kinase complex, class IA,membrane,perinuclear endoplasmic reticulum membrane,
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).
Function	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 phosphorylat

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],

matters needing attention

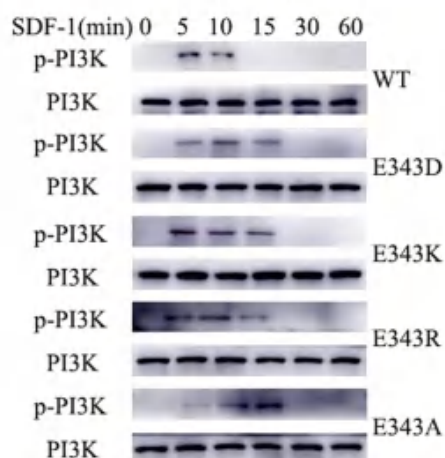
Avoid repeated freezing and thawing!

Usage suggestions

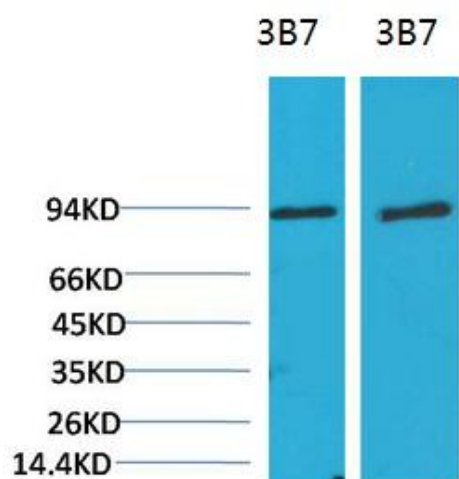
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



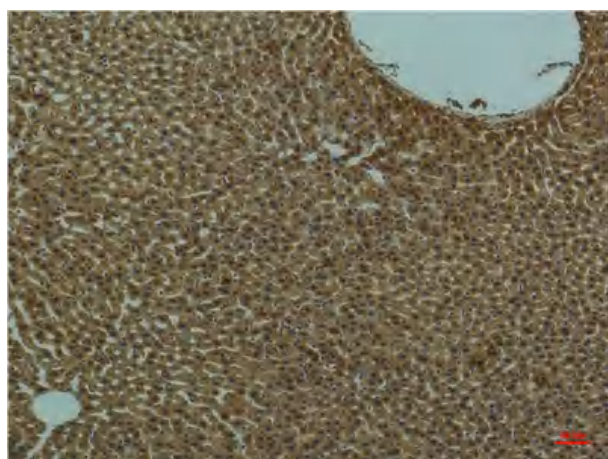
Products Images



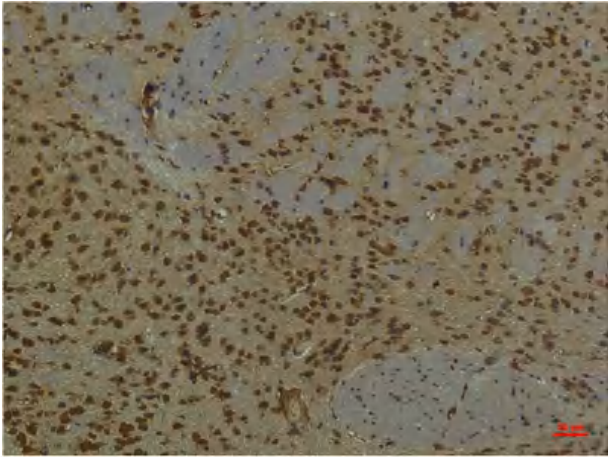
Wang, L., Xiong, Q., Li, P. et al. The negative charge of the 343 site is essential for maintaining physiological functions of CXCR4. BMC Mol and Cell Biol 22, 8 (2021).



Western blot analysis of 1)3T3, 2) Rat LiverTissue with PI3 Kinase P85 α 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 Brain Tissue using PI3 Kinase P85 α Mouse mAb diluted at 1:200.