ARG43257
anti-PI3 Kinase p85 alpha antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PI3 Kinase p85 alpha
Tested Reactivity	Hu, Rat, Hm
Predict Reactivity	Ms
Tested Application	FACS, ICC/IF, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PI3 Kinase p85 alpha
Species	Human
Immunogen	Synthetic peptide of Human PI3 Kinase p85 alpha.
Conjugation	Un-conjugated
Alternate Names	GRB1; PI3-kinase subunit p85-alpha; Phosphatidylinositol 3-kinase regulatory subunit alpha; IMD36; PtdIns-3-kinase regulatory subunit alpha; p85-ALPHA; p85; AGM7; PtdIns-3-kinase regulatory subunit p85-alpha; PI3-kinase regulatory subunit alpha; PI3K regulatory subunit alpha; Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha

Application Instructions

Application table

Application	Dilution
FACS	1:20
ICC/IF	1:50
IP	1:20
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Rat brain
Observed Size	~ 86 kDa

Properties

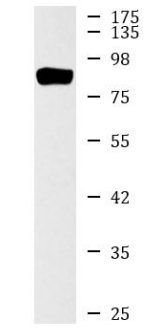
Form	Liquid
Purification	Affinity purified.
Buffer	50 mM Tris-Glycine (pH 7.4), 150 mM NaCl, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide

Stabilizer	40% Glycerol and 0.05% BSA
Concentration	Batch dependent
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PIK3R1
Gene Full Name	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)
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]
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). [UniProt]
Calculated Mw	84 kDa
PTM	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 (By similarity). Phosphorylated in response to KIT and KITLG/SCF. Phosphorylated by FGR. [UniProt]

Images



Rat brain

ARG43257 anti-PI3 Kinase p85 alpha antibody WB image

Western blot: Rat brain lysate stained with ARG43257 anti-PI3 Kinase p85 alpha antibody at 1:1000 dilution.