

# Product datasheet

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# ARG66900 anti-PI3 Kinase p85 alpha antibody

Package: 100 μl Store at: -20°C

# Summary

Product Description Mouse Monoclonal antibody recognizes PI3 Kinase p85 alpha

Tested Reactivity Ms, Rat

Predict Reactivity Hu

Tested Application IHC-P, WB
Host Mouse

Clonality Monoclonal

Isotype IgG

Target Name PI3 Kinase p85 alpha

Species Human

Immunogen Recombinant protein of Human PI3 Kinase p85 alpha.

Conjugation Un-conjugated

Alternate Names GRB1; PI3-kinase subunit p85-alpha; Phosphatidylinositol 3-kinase regulatory subunit alpha; IMD36;

Ptdlns-3-kinase regulatory subunit alpha; p85-ALPHA; p85; AGM7; Ptdlns-3-kinase regulatory subunit p85-alpha; Pl3-kinase regulatory subunit alpha; Pl3-kinase r

3-kinase 85 kDa regulatory subunit alpha

# **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:100 - 1:200
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	NIH/3T3 and Rat liver	
Observed Size	~ 90 kDa	

# **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol and 0.5% BSA

Concentration 1 mg/ml

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.

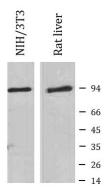
Phosphorylated. Tyrosine phosphorylated in response to signaling by FGFR1, FGFR2, FGFR3 and FGFR4. Phosphorylated by CSF1R. Phosphorylated by ERBB4. Phosphorylated on tyrosine residues by TEK/TIE2. Dephosphorylated by PTPRJ. Phosphorylated by PIK3CA at Ser-608; phosphorylation is stimulated by insulin 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**



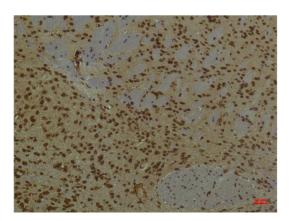
#### ARG66900 anti-PI3 Kinase p85 alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat liver tissue stained with ARG66900 anti-PI3 Kinase p85 alpha antibody at 1:200 dilution.



# ARG66900 anti-PI3 Kinase p85 alpha antibody WB image

Western blot: NIH/3T3 and Rat liver lysates stained with ARG66900 anti-PI3 Kinase p85 alpha antibody at 1:2000 dilution.



# ARG66900 anti-PI3 Kinase p85 alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain tissue stained with ARG66900 anti-PI3 Kinase p85 alpha antibody at 1:200 dilution.