

# Product datasheet

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# ARG55392 anti-PI3 Kinase p85 beta antibody

Package: 100 μl Store at: -20°C

## **Summary**

Product Description Mouse Monoclonal antibody recognizes PI3 Kinase p85 beta

Tested Reactivity Hu, Ms, Rat

Tested Application WB

Specificity This antibody detects endogenous levels of PI3 Kinase p85 beta and does not cross-react with related

proteins.

Host Mouse

Clonality Monoclonal

Isotype IgG1

Target Name PI3 Kinase p85 beta

Species Human

Immunogen Purified recombinant fragment of Human PI3 Kinase p85 beta (NP\_005018.1).

Conjugation Un-conjugated

Alternate Names P85B; Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta; PtdIns-3-kinase regulatory subunit

beta; PI3-kinase regulatory subunit beta; p85; PI3K regulatory subunit beta; MPPH1; MPPH; Phosphatidylinositol 3-kinase regulatory subunit beta; PtdIns-3-kinase regulatory subunit p85-beta;

p85-BETA; PI3-kinase subunit p85-beta

### **Application Instructions**

Application table	Application	Dilution
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

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

Database links <u>GeneID: 18709 Mouse</u>

GeneID: 5296 Human

Swiss-port # O00459 Human

Swiss-port # 008908 Mouse

Gene Symbol PIK3R2

Gene Full Name phosphoinositide-3-kinase, regulatory subunit 2 (beta)

Background Phosphatidylinositol 3-kinase (PI3K) is a lipid kinase that phosphorylates phosphatidylinositol and

similar compounds, creating second messengers important in growth signaling pathways. PI3K functions as a heterodimer of a regulatory and a catalytic subunit. The protein encoded by this gene is a regulatory component of PI3K. Two transcript variants, one protein coding and the other non-protein

coding, have been found for this gene. [provided by RefSeq, Dec 2012]

Function Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P2

(Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy. Promotes 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 (By similarity). [UniProt]

Research Area Immune System antibody; Signaling Transduction antibody

Calculated Mw 82 kDa

PTM Phosphorylated in response to signaling from activated receptor-type protein kinases

(PubMed:19690332, PubMed:20068231). Dephosphorylated by PTPRJ (PubMed:18348712). Dephosphorylated at Tyr-655 by PTPN13. Phosphorylation of Tyr-655 impairs while its

dephosphorylation promotes interaction with FBXL2 and SCF(FBXL2)-mediated polyubiquitination

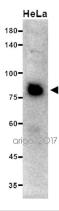
(PubMed:23604317).

Ubiquitinated. Polyubiquitination by the SCF(FBXL2) complex probably promotes proteasomal

degradation of PIK3R2.

Cellular Localization Cytosol.

#### **Images**



### ARG55392 anti-PI3 Kinase p85 beta antibody WB image

Western blot: 20  $\mu g$  of HeLa cell lysate stained with ARG55392 anti-PI3 Kinase p85 beta antibody at 1:1000 dilution.