

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

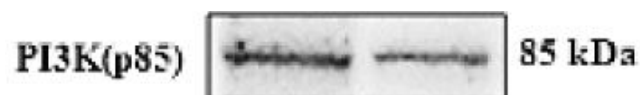
Application table	Application	Dilution
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

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.

Database links	GeneID: 18709 Mouse GeneID: 5296 Human Swiss-port # O00459 Human Swiss-port # O08908 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 PDK1, 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.

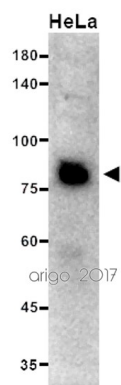
Images



ARG55392 anti-PI3 Kinase p85 beta antibody WB image

Western blot: Hela stained with ARG55392 anti-PI3 Kinase p85 beta antibody.

From Chen YH et al. Cancers (Basel)- (2022), [doi: 10.3390/cancers14071824](https://doi.org/10.3390/cancers14071824), Fig. 3. A.



ARG55392 anti-PI3 Kinase p85 beta antibody WB image

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