

ARG40865 anti-PI3 Kinase p85 beta antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PI3 Kinase p85 beta
Tested Reactivity	Hu, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PI3 Kinase p85 beta
Species	Human
Immunogen	Synthetic peptide derived from Human PI3 Kinase p85 beta.
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
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:500 - 1:2000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

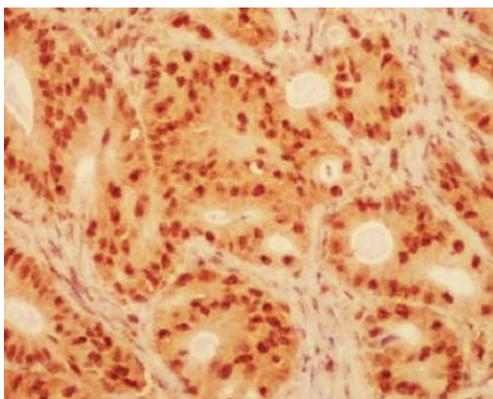
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store 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

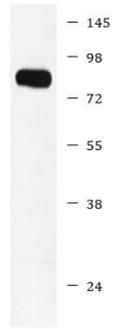
Gene Symbol	PIK3R2
Gene Full Name	phosphoinositide-3-kinase, regulatory subunit 2 (beta)
Background	Phosphatidylinositol 3-kinase (PI3K) is a lipid kinase that phosphorylates phosphatidylinositol and similar compounds, creating second messengers important in growth signaling pathways. PI3K functions 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)P ₂ (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP ₃). PIP ₃ 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]
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. [UniProt]

Images



ARG40865 anti-PI3 Kinase p85 beta antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue stained with ARG40865 anti-PI3 Kinase p85 beta antibody.



HeLa

ARG40865 anti-PI3 Kinase p85 beta antibody WB image

Western blot: HeLa cell lysate stained with ARG40865 anti-PI3 Kinase p85 beta antibody.