ARG23727
anti-PIK3CA / p110 alpha antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PIK3CA / p110 alpha
Tested Reactivity	Ms
Predict Reactivity	Hu
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PIK3CA / p110 alpha
Species	Human
Immunogen	KLH-conjugated synthetic peptide around aa. 150-250 of Human PI3 kinase p110 alpha.
Conjugation	Un-conjugated
Alternate Names	MCM; MCMTC; p110alpha; PI3-kinase subunit alpha; PI3K; CWS5; p110-alpha; PI3Kalpha; CLOVE; EC 2.7.1.153; MCAP; PtdIns-3-kinase subunit p110-alpha; EC 2.7.11.1; Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform; Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subunit alpha; PI3K-alpha; PtdIns-3-kinase subunit alpha; Phosphoinositide-3-kinase catalytic alpha polypeptide; Serine/threonine protein kinase PIK3CA

Application Instructions

Application table

Application	Dilution
WB	1:1000

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

Properties

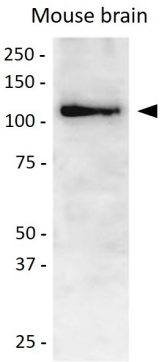
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol.
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term 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	PIK3CA
Gene Full Name	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha
Background	Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. [provided by RefSeq, Jul 2008]
Function	Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and 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. Participates in cellular signaling in response to various growth factors. Involved in the activation of AKT1 upon stimulation by receptor tyrosine kinases ligands such as EGF, insulin, IGF1, VEGFA and PDGF. Involved in signaling via insulin-receptor substrate (IRS) proteins. Essential in endothelial cell migration during vascular development through VEGFA signaling, possibly by regulating RhoA activity. Required for lymphatic vasculature development, possibly by binding to RAS and by activation by EGF and FGF2, but not by PDGF. Regulates invadopodia formation in breast cancer cells through the PDPK1-AKT1 pathway. Participates in cardiomyogenesis in embryonic stem cells through a AKT1 pathway. Participates in vasculogenesis in embryonic stem cells through PDK1 and protein kinase C pathway. Has also serine-protein kinase activity: phosphorylates PIK3R1 (p85alpha regulatory subunit), EIF4EBP1 and HRAS. [UniProt]
Calculated Mw	124 kDa

Images



ARG23727 anti-PIK3CA / p110 alpha antibody WB image

Western blot: 15 µg of Mouse brain lysate stained with ARG23727 anti-PIK3CA / p110 alpha antibody at 1:1000 for 2 hours at RT.