

Datasheet for ABIN2178474
anti-PIK3CA antibody (AA 1010-1050) (PE)[Go to Product page](#)

1 Publication

Overview

Quantity:	100 µL
Target:	PIK3CA
Binding Specificity:	AA 1010-1050
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIK3CA antibody is conjugated to PE
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human PI3KCA
Isotype:	IgG
Cross-Reactivity:	Cow, Human, Mouse, Rabbit, Rat
Predicted Reactivity:	Cow,Chicken
Purification:	Purified by Protein A.

Target Details

Target:	PIK3CA
Alternative Name:	Pi3kca (PIK3CA Products)
Background:	Synonyms: MCM, CWS5, MCAP, PI3K, CLOVE, MCMTC, p11-alpha, Phosphatidylinositol 4,5-

Target Details

bisphosphate 3-kinase catalytic subunit alpha isoform, PI3-kinase subunit alpha, PI3K-alpha, PI3Kalpha, PtdIns-3-kinase subunit alpha, Phosphatidylinositol 4,5-bisphosphate 3-kinase 11 kDa catalytic subunit alpha, PtdIns-3-kinase subunit p11-alpha, p11alpha, Phosphoinositide-3-kinase catalytic alpha polypeptide, Serine/threonine protein kinase PIK3CA, PIK3CA

Background: 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 PDK1, 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 PDK1-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.

Gene ID:	5290
UniProt:	P42336
Pathways:	PI3K-Akt Signaling , RTK Signaling , TCR Signaling , AMPK Signaling , Interferon-gamma Pathway , TLR Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Inositol Metabolic Process , Hepatitis C , CXCR4-mediated Signaling Events , Signaling Events mediated by VEGFR1 and VEGFR2 , Signaling of Hepatocyte Growth Factor Receptor , VEGFR1 Specific Signals , VEGF Signaling

Application Details

Application Notes:	FCM(1:20-100)
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:	Paul-Samojedny, Suchanek, Borkowska, Pudełko, Owczarek, Kowalczyk, Machnik, Fila-Daniłow, Kowalski: "Knockdown of AKT3 (PKB?) and PI3KCA suppresses cell viability and proliferation and induces the apoptosis of glioblastoma multiforme T98G cells." in: BioMed research international , Vol. 2014, pp. 768181, (2014) (PubMed).
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