

## PI3KCA Antibody HRP Conjugated

Catalog No: #C03929H

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## Description

Product Name	PI3KCA Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	WB IHC-P IHC-F ICC
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated synthetic peptide aa 1010-1050 1068 derived from human PI3KCA
Conjugates	HRP
Target Name	PI3KCA
Other Names	MCM; CWS5; MCAP; PI3K; CLOVE; MCMTC; p11-alpha; Phosphatidylinositol 4,5-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
Accession No.	Swiss-Prot#P42336NCBI Gene ID5290
Uniprot	P42336
GeneID	5290;
Excitation Emission	N A
Cell Localization	Cytoplasm, Membrane bound
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

## Application Details

WB=1:500-2000 IHC-P=1:50-200 IHC-F=1:50-200 ICC=1:50-200

## Background

Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and PtdIns(4,5)P<sub>2</sub> (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP<sub>3</sub>). PIP<sub>3</sub> 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.

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Note: This product is for in vitro research use only