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# Datasheet for ABIN677198 anti-PIK3CA antibody (AA 961-1068)

3 Images

1 Publication



## Overview

Quantity:	100 µL
Target:	PIK3CA
Binding Specificity:	AA 961-1068
Reactivity:	Human, Mouse, Rat, Cow, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIK3CA antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunocytochemistry (ICC)

## Product Details

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

Target:

## PIK3CA

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Target Details	
Alternative Name:	PI3KCA (PIK3CA Products)
Background:	Synonyms: 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 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 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.
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:	WB 1:300-5000

ELISA 1:500-1000
IHC-P 1:200-400

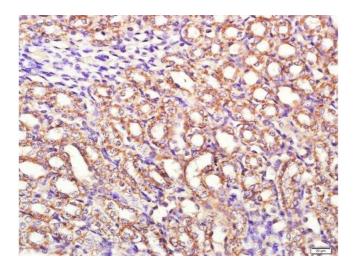
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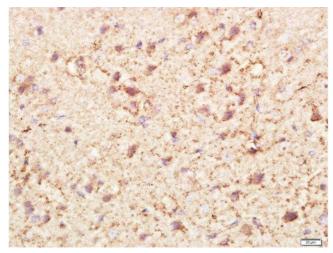
Restrictions:	For Research Use only
	ICC 1:100-500
	IF(ICC) 1:50-200
	IF(IHC-F) 1:50-200
	IF(IHC-P) 1:50-200
	IHC-F 1:100-500

## Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months
Publications	
Product cited in:	Paul-Samojedny, Suchanek, Borkowska, Pude?ko, Owczarek, Kowalczyk, Machnik, Fila-Dani?ow,
	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).





# 245 180 135 100 75 63 48 35 25

## Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** Paraformaldehyde-fixed, paraffin embedded rat kidney tissue, Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-PI3KCA Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining

#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Paraformaldehyde-fixed, paraffin embedded rat brain tissue, Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-PI3KCA Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining

### Western Blotting

**Image 3.** HeLa Cell lysates probed with PI3KCA Polyclonal Antibody, unconjugated at 1:300 overnight at 4°C followed by a conjugated secondary antibody for 60 minutes at 37°C.

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