

Datasheet for ABIN7163188

anti-PIK3CA antibody (Catalytic Subunit alpha)[Go to Product page](#)**2** Images

Overview

Quantity:	100 µg
Target:	PIK3CA
Binding Specificity:	AA 1-206, Catalytic Subunit alpha
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIK3CA antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform protein (1-206AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PIK3CA
Alternative Name:	PIK3CA (PIK3CA Products)
Background:	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 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. Also has serine-protein kinase activity: phosphorylates PIK3R1 (p85alpha regulatory subunit), EIF4EBP1 and HRAS. Plays a role in the positive regulation of phagocytosis and pinocytosis (By similarity). Aliases: 5-bisphosphate 3-kinase 110 kDa catalytic subunit alpha antibody, 5-bisphosphate 3-kinase catalytic subunit alpha isoform antibody, caPI3K antibody, CLOVE antibody, CWS5 antibody, MCAP antibody, MCM antibody, MCMTC antibody, MGC142161 antibody, MGC142163 antibody, p110 alpha antibody, p110alpha antibody, Phosphatidylinositol 3 kinase catalytic alpha polypeptide antibody, Phosphatidylinositol 3 kinase catalytic 110 KD alpha antibody, Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha antibody, Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha isoform antibody, Phosphatidylinositol 4,5 bisphosphate 3 kinase 110 kDa catalytic subunit alpha antibody, Phosphatidylinositol-4 antibody, Phosphoinositide 3 kinase catalytic alpha polypeptide antibody, PI 3 Kinase catalytic subunit alpha antibody, PI3 kinase p110 subunit alpha antibody, PI3-kinase subunit alpha antibody, PI3K antibody, PI3K-alpha antibody, PI3KC A antibody, PIK3C A antibody, Pik3ca antibody, PK3CA antibody, PK3CA_HUMAN antibody, PtdIns 3 kinase p110 antibody, PtdIns-3-kinase subunit alpha antibody, PtdIns-3-kinase subunit p110-alpha antibody, Serine/threonine protein kinase PIK3CA antibody

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: Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

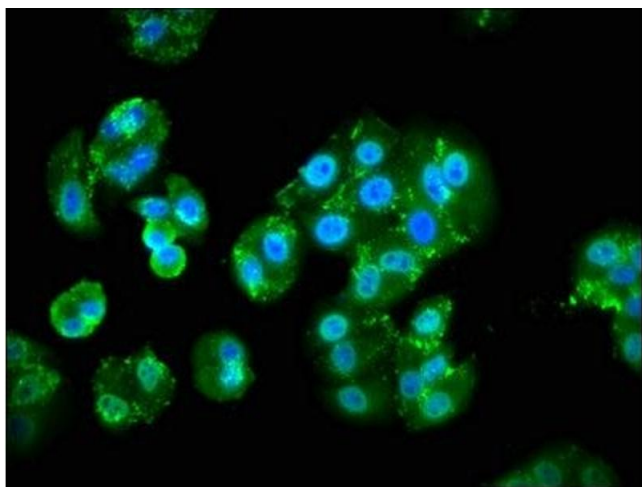
Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C,-80 °C

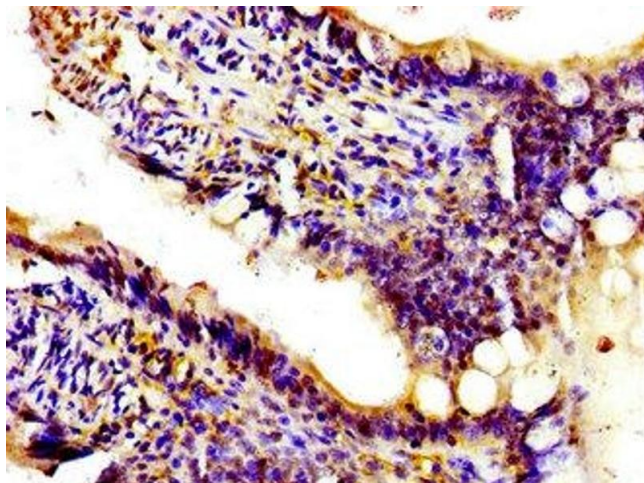
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescence staining of HepG2 cells with ABIN7163188 at 1:133, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human small intestine tissue using ABIN7163188 at dilution of 1:100