

Rabbit PI3 kinase P110alpha Polyclonal Antibody | anti-PIK3CA antibody

PI3 kinase P110alpha Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321801	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

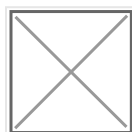
PRODUCT SYNONYMS

PI3 kinase P110alpha; Polyclonal Antibody; PI3 kinase P110alpha Antibody; 5-bisphosphate 3-kinase 110 kDa catalytic subunit alpha; 5-bisphosphate 3-kinase catalytic subunit alpha isoform; caPI3K; CLOVE; CWS5; MCAP; MCM; MCMTC; MGC142161; MGC142163; p110 alpha; p110alpha; Phosphatidylinositol 3 kinase catalytic alpha polypeptide; Phosphatidylinositol 3 kinase catalytic 110 KD alpha; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha isoform; Phosphatidylinositol 4; 5 bisphosphate 3 kinase 110 kDa catalytic subunit alpha; Phosphatidylinositol-4; Phosphoinositide 3 kinase catalytic alpha polypeptide; PI3 kinase p110 subunit alpha; PI3-kinase subunit alpha; PI3K; PI3K-alpha; PI3KC A; PIK3C A; Pik3ca; PK3CA; PK3CA_HUMAN; PtdIns 3 kinase p110; PtdIns-3-kinase subunit alpha; PtdIns-3-kinase subunit p110-alpha; Serine/threonine protein kinase PIK3CA; anti-PIK3CA antibody

PRODUCT SPECIFICATIONS

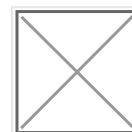
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PI3 kinase P110alpha antibody detects endogenous levels of total PI3 kinase P110alpha
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1068
Applicable Applications for anti-PIK3CA antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PI3 kinase P110alpha
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA321801 at 1/100 staining human liver cancer tissues sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours



WB (Western Blot)

Western blot analysis of PI3 kinase P110alpha expression in mouse liver.



IHC (Immunohistochemistry)

AAA321801 at 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of PI3 kinase P110alpha expression in rat liver

ADDITIONAL INFORMATION

Related Product Information for anti-PIK3CA antibody

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 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).

Subunit Structure: Heterodimer of a catalytic subunit PIK3CA and a p85 regulatory subunit (PIK3R1, PIK3R2 or PIK3R3) (PubMed:26593112). Interacts with IRS1 in nuclear extracts (By similarity). Interacts with RUFY3 (By similarity). Interacts with RASD2 (By similarity). Interacts with APPL1. Interacts with HRAS and KRAS (By similarity). Interaction with HRAS/KRAS is required for PI3K pathway signaling and cell proliferation stimulated by EGF and FGF2 (By similarity). Interacts with FAM83B; activates the PI3K/AKT signaling cascade (PubMed:23676467).

Similarity: The PI3K-ABD domain and the PI3K-RBD domain interact with the PI3K/PI4K kinase domain. The C2 PI3K-type domain may facilitate the recruitment to the plasma membrane. The inhibitory interactions with PIK3R1 are mediated by the PI3K-ABD domain and the C2 PI3K-type domain with the iSH2 (inter-SH2) region of PIK3R1, and the C2 PI3K-type domain, the PI3K helical domain, and the PI3K/PI4K kinase domain with the nSH2 (N-terminal SH2) region of PIK3R1. Belongs to the PI3/PI4-kinase family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	54792082
NCBI GeneID	5290
NCBI Accession #	NP_006209.2
NCBI GenBank Nucleotide #	NM_006218.3
UniProt Accession #	P42336; Q14CW1; Q99762
Molecular Weight	Observed: 124 kDa Predicted: 125 kDa
NCBI Official Full Name	phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform
NCBI Official Synonym Full Names	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha
NCBI Official Symbol	PIK3CA
NCBI Official Synonym Symbols	MCM; CWS5; MCAP; PI3K; CLAPO; CLOVE; MCMTC; PI3K-alpha; p110-alpha
NCBI Protein Information	phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform
UniProt Protein Name	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform

UniProt Gene Name	PIK3CA
UniProt Synonym Gene Names	PI3-kinase subunit alpha; PI3K-alpha; PI3Kalpha; PtdIns-3-kinase subunit alpha; PtdIns-3-kinase subunit p110-alpha; p110alpha

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pi3-kinase-p110alpha-antibody-immunohistochemistry-western-blot-elisa/321801>