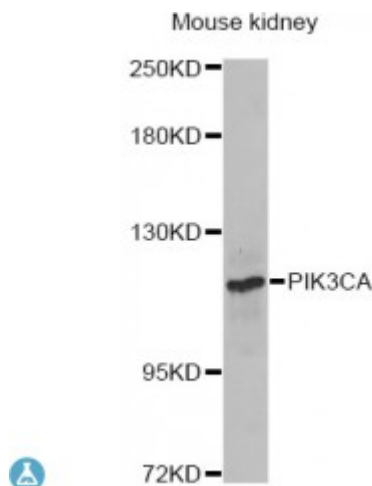


Anti-PIK3CA Antibody



Description

Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has been defined on chromosome 22.

Model	STJ114358
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IHC, WB
Immunogen	A synthetic peptide of human PIK3CA
Gene ID	5290
Gene Symbol	PIK3CA
Dilution range	WB 1:500 - 1:2000 IHC 1:50 - 1:200
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform PI3-kinase subunit alpha PI3K-alpha PI3Kalpha PtdIns-3-kinase subunit alpha
Molecular Weight	124.284 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:8975OMIM:114480Reactome:R-HSA-109704
Alternative Names	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform PI3-kinase subunit alpha PI3K-alpha PI3Kalpha PtdIns-3-kinase subunit alpha
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 ,