Anti-PI 3-Kinase p11 gamma antibody

Description	Rabbit polyclonal to PI 3-Kinase p110gamma.

Model	STJ95075
Host	Rabbit
Reactivity	Human
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human PI 3-Kinase p110gamma
Immunogen Region	850-930 aa, Internal
Gene ID	5294
Gene Symbol	PIK3CG
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	PI 3-Kinase p110gamma Polyclonal Antibody detects endogenous levels of PI 3-Kinase p110gamma protein.
Tissue Specificity	Pancreas, skeletal muscle, liver and heart.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform PI3-kinase subunit gamma PI3K-gamma PI3Kgamma PtdIns-3-kinase subunit gamma Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subun

Molecular Weight	135 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:8978OMIM:601232
Alternative Names	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform PI3-kinase subunit gamma PI3K-gamma PI3Kgamma PtdIns-3-kinase subunit gamma Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subun
Function	Phosphoinositide-3-kinase (PI3K) that phosphorylates 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. Links G-protein coupled receptor activation to PIP3 production. Involved in immune, inflammatory and allergic responses. Modulates leukocyte chemotaxis to inflammatory sites and in response to chemoattractant agents. May control leukocyte polarization and migration by regulating the spatial accumulation of PIP3 and by regulating the organization of F-actin formation and integrin-based adhesion at the leading edge. Controls motility of dendritic cells. Together with PIK3CD is involved in natural killer (NK) cell development and migration towards the sites of inflammation. Participates in T-lymphocyte migration. Regulates T-lymphocyte proliferation and cytokine production. Together with PIK3CD participates in T-lymphocyte development. Required for B-lymphocyte development and signaling. Together with PIK3CD participates in neutrophil respiratory burst. Together with PIK3CD is involved in neutrophil chemotaxis and extravasation. Together with PIK3CB promotes platelet aggregation and thrombosis. Regulates alpha-IIb/beta-3 integrins (ITGA2B/ ITGB3) adhesive function in platelets downstream of P2Y12 through a lipid kinase activity-independent mechanism. May have also a lipid kinase activity-dependent function in platelet aggregation. Involved in endothelial progenitor cell migration. Negative regulator of cardiac contractility. Modulates cardiac contractility by anchoring protein kinase A (PKA) and PDE3B activation, reducing cAMP levels. Regulates cardiac contractility also by promoting beta-adrenergic receptor internalization by binding to GRK2 and by non-muscle tropomyosin phosphorylation. Also has serine/threonine protein kinase activity: both lipid and protein kinase activities are required for beta-adrenergic receptor endocytosis. May also have a scaffolding role in modulating cardiac contractility. Contributes to cardiac hypertrophy under pathological stress. Through simultaneous binding of PDE3B to RAPGEF3 and PIK3R6 is assembled in a signaling complex in which the PI3K gamma complex is activated by RAPGEF3 and which is involved in angiogenesis.
Cellular Localization	Cytoplasm Cell membrane

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