

PIK3CG / PI3K Gamma Antibody
Rabbit Polyclonal Antibody
Catalog # ALS15826**Specification**

PIK3CG / PI3K Gamma Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P48736
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	126kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A

PIK3CG / PI3K Gamma Antibody - Additional Information**Gene ID** 5294**Other Names**

Phosphatidylinositol 4, 5-bisphosphate 3-kinase catalytic subunit gamma isoform, PI3-kinase subunit gamma, PI3K-gamma, PI3Kgamma, PtdIns-3-kinase subunit gamma, 2.7.1.153, Phosphatidylinositol 4, 5-bisphosphate 3-kinase 110 kDa catalytic subunit gamma, PtdIns-3-kinase subunit p110-gamma, p110gamma, Phosphoinositide-3-kinase catalytic gamma polypeptide, Serine/threonine protein kinase PIK3CG, 2.7.11.1, p120-PI3K, PIK3CG

Target/Specificity

This Polyclonal antibody is directed against human PI3K protein. The product was purified from serum by protein A chromatography. Expect reactivity with human PI3K. Cross-reactivity with PI3K from other sources has not been determined.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

PIK3CG / PI3K Gamma Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PIK3CG / PI3K Gamma Antibody - Protein Information**Name** PIK3CG**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 PDK1, 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, activation, 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. In neutrophils, participates in a phospholipase C-activating N-formyl peptide-activated GPCR (G protein- coupled receptor) signaling pathway downstream of RASGRP4-mediated Ras- activation, to promote neutrophil functional responses (By similarity).

Cellular Location

Cytoplasm. Cell membrane

Tissue Location

Pancreas, skeletal muscle, liver and heart.

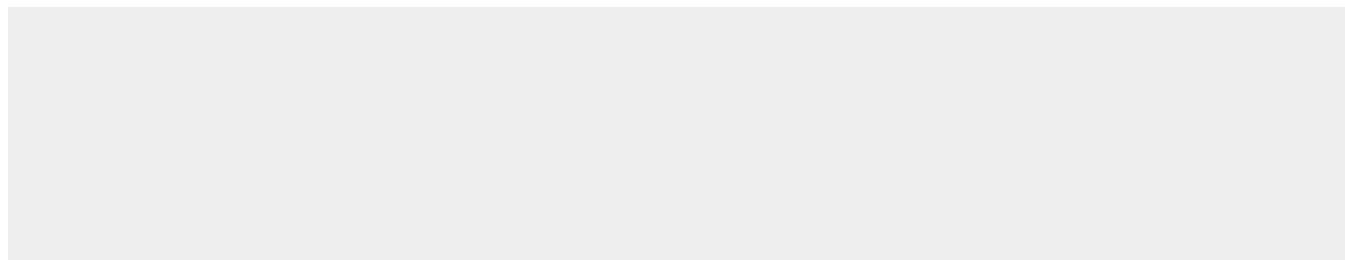
Volume

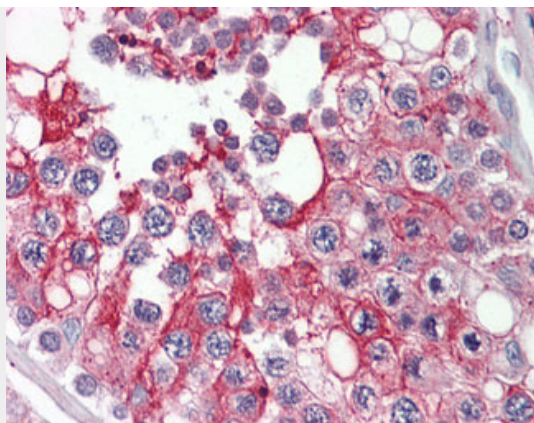
50 µl

PIK3CG / PI3K Gamma Antibody - Protocols

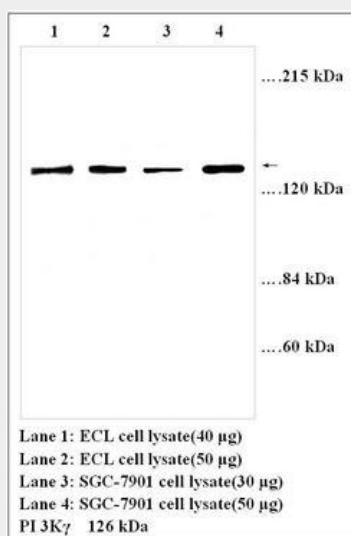
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PIK3CG / PI3K Gamma Antibody - Images



Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)



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PIK3CG / PI3K Gamma Antibody - Background

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PIK3CG / PI3K Gamma Antibody - References

Stoyanov B.,et al.Science 269:690-693(1995).
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Hillier L.W.,et al.Nature 424:157-164(2003).
Scherer S.W.,et al.Science 300:767-772(2003).