

# Immunotag™ PIK3CG Antibody

Antibody Specification	
Catalog No.	ITA6154
Product Description	Immunotag™ PIK3CG Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PIK3CG
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IF/ICC,ELISA
Recommended Dilution	WB 1:500-1:2000, IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human PIK3CG
Specificity	PIK3CG Antibody detects endogenous levels of total PIK3CG
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	PIK3CG
Accession No.	P48736

## Antibody Specification

Alternate Names	<p>1 phosphatidylinositol 3 kinase; 5-bisphosphate 3-kinase 110 kDa catalytic subunit gamma; 5-bisphosphate 3-kinase catalytic subunit gamma isoform; p110 gamma; p110gamma; p120 PI3K; p120-PI3K; Phosphatidylinositol 3 kinase catalytic 110 kD gamma; Phosphatidylinositol 3 kinase gamma, p110 gamma; Phosphatidylinositol 3 kinase, catalytic, gamma polypeptide; Phosphatidylinositol 4 5 bisphosphate 3 kinase 110 kDa catalytic subunit gamma; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit gamma isoform; Phosphatidylinositol-4; Phosphoinositide 3 kinase catalytic gamma polypeptide; Phosphoinositide 3 kinase gamma catalytic subunit; PI3 kinase p110 subunit gamma; PI3-kinase subunit gamma; PI3CG; PI3K; PI3K-gamma; PI3Kgamma; PIK3; Pik3cg; PK3CG_HUMAN; PtdIns-3-kinase subunit gamma; PtdIns-3-kinase subunit p110-gamma; Serine/threonine protein kinase PIK3CG;</p>
Description	<p>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 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.</p>
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	126kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.