

Recombinant Human PIK3CG, His-tagged

Cat. No. PIK3CG-53H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length PI3Kg (126.3 kDa without Tag) produced in Sf9 carries an N-terminal His 8 affinity Tag.
Species	Human
Source	Sf9 Cells
Description	PI3Kg is highly expressed in cells of hematopoietic origin. It plays an important role in dendritic cell (DC) trafficking and in the activation of specific immunity. PI3Kg ^{-/-} mice showed a reduced ability to respond to chemokines, and had a selective defect in the number of skin Langerhans cells and in lymph node CD8a-DCs. In macrophages, the chemokine RANTES/CCL5 activates the small GTPase Rac1 and its downstream target PAK2. This response depends on Gi activation and largely on the subsequent triggering of PI3Kg.
Physical Appearance	Sterile Filtered clear solution.
Purity	Greater than 95.0% as determined by SDS-PAGE.
Formulation	0.5 mg/ml solution in 25mM HEPES, pH 8.0, 25mM NaCl, 2.5mM MgCl ₂ , and 50% glycerol.
Biological Activity	4.5 nmol/mg/min using phosphatidylinositol as the substrate.
Storage	PI3Kg although stable at 14°C for 1 week, should be stored desiccated below -18°C.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Full Length Full L.

GENE INFORMATION

Gene Name PIK3CG phosphoinositide-3-kinase, catalytic, gamma polypeptide [Homo sapiens]

Synonyms

PIK3CG; phosphoinositide-3-kinase, catalytic, gamma polypeptide; PI3-kinase; p110-gamma; PTDINS-3-kinase; 1-phosphatidylinositol 3-kinase; phosphatidylinositol 3 kinase gamma, p110 gamma; phosphoinositide-3-kinase gamma catalytic subunit; hosphatidylinositol 3-kinase catalytic 110-kD gamma; phosphatidylinositol 3-kinase, catalytic, gamma polypeptide; EC 2.7.1.153; PI3-kinase p110 subunit gamma; PtdIns-3-kinase subunit p110; PI3Kgamma; PI3K; p120-PI3K

Gene ID 5294

mRNA Refseq NM_002649

Protein Refseq NP_002640

MIM 601232

UniProt ID P48736

Chromosome Location 7q22.3

Pathway Acute myeloid leukemia; Apoptosis; B cell receptor signaling pathway; Chemokine signaling pathway; Chronic myeloid leukemia; Colorectal cancer; Endometrial cancer;

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ErbB signaling pathway; Fc epsilon RI signaling pathway; Fc gamma R-mediated phagocytosis; Focal adhesion; Glioma; Inositol phosphate metabolism; Insulin signaling pathway; Jak-STAT signaling pathway; Leukocyte transendothelial migration; Melanoma; Natural killer cell mediated cytotoxicity; Neurotrophin signaling; Pancreatic cancer; Pathways in cancer; Phosphatidylinositol signaling system; Prostate cancer; Regulation of actin cytoskeleton; Renal cell carcinoma; Small cell lung cancer; T cell receptor signaling pathway; Toll-like receptor signaling pathway; Type II diabetes mellitus; VEGF signaling pathway; mTOR signaling pathway; Hemostasis; Signaling by GPCR

Function

1-phosphatidylinositol-3-kinase activity; ATP binding; inositol or phosphatidylinositol kinase activity; nucleotide binding; phosphatidylinositol-4,5-bisphosphate 3-kinase activity; phosphotransferase activity, alcohol group as acceptor; protein binding; transferase activity

PDB rendering based on 17eu.

