

Product datasheet for **CF505227**

PI 3 Kinase catalytic subunit gamma (PIK3CG) Mouse Monoclonal Antibody [Clone ID: OTI4G10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4G10
Applications:	IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PIK3CG(NP_002640) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	126.3 kDa
Gene Name:	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma
Database Link:	NP_002640 Entrez Gene 30955 Mouse Entrez Gene 298947 Rat Entrez Gene 5294 Human P48736



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Background:

This gene encodes a protein that belongs to the pi3/pi4-kinase family of proteins. The gene product is an enzyme that phosphorylates phosphoinositides on the 3-hydroxyl group of the inositol ring. It is an important modulator of extracellular signals, including those elicited by E-cadherin-mediated cell-cell adhesion, which plays an important role in maintenance of the structural and functional integrity of epithelia. In addition to its role in promoting assembly of adherens junctions, the protein is thought to play a pivotal role in the regulation of cytotoxicity in NK cells. The gene is located in a commonly deleted segment of chromosome 7 previously identified in myeloid leukemias. [provided by RefSeq, Jul 2008]

Synonyms:

p110gamma; p120-PI3K; PI3CG; PI3K; PI3Kgamma; PIK3

Protein Families:

Druggable Genome, ES Cell Differentiation/IPS

Protein Pathways:

Acute myeloid leukemia, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, 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, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Phosphatidylinositol signaling system, Progesterone-mediated oocyte maturation, 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

Product images:

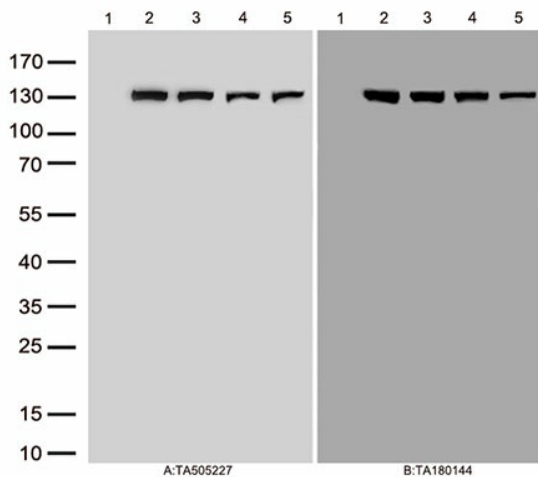
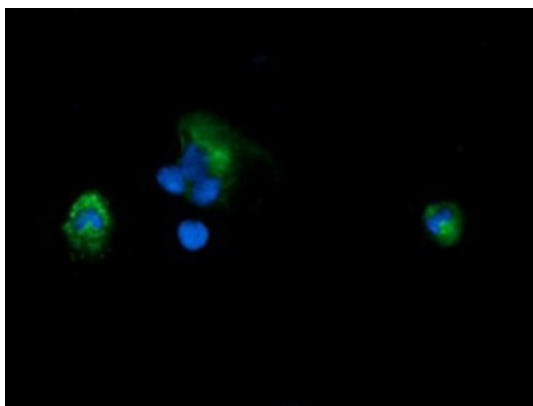


Figure A, Western blot analysis of overexpressed lysates(25ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], lane 1) , human PIK3CG plasmid ([RC207790], lane 2), mouse PIK3CG v1 plasmid ([MR227199], lane 3) , mouse PIK3CG v2 plasmid ([MR211638], lane 4) , mouse PIK3CG v3 plasmid ([MR227194], lane 5) using anti-PIK3CG antibody [TA505227] (1:500). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)



Anti-PIK3CG mouse monoclonal antibody ([TA505227]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PIK3CG ([RC207790]).