

#### OriGene Technologies, Inc.

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## **Product datasheet for TA505222**

# PI 3 Kinase catalytic subunit gamma (PIK3CG) Mouse Monoclonal Antibody [Clone ID: OTI1A9]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1A9
Applications: IHC, WB

Recommend Dilution: WB 1:2000, IHC 1:150

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PIK3CG(NP\_002640) produced in HEK293T

cell.

**Formulation:** PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 126.3 kDa

**Gene Name:** phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma

Database Link: NP 002640 Entrez Gene 5294 Human

**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 Ecadherin-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-Pl3K; Pl3CG; Pl3K; Pl3Kgamma; PlK3

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS

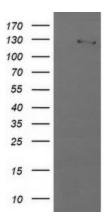




#### **Protein Pathways:**

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:**

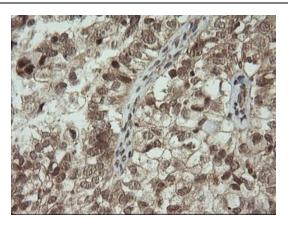


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PIK3CG ([RC207790], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PIK3CG. Positive lysates [LY419184] (100ug) and [LC419184] (20ug) can be purchased separately from OriGene.

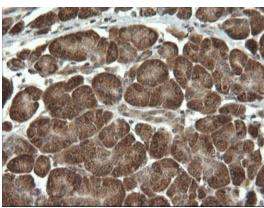


Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-PIK3CG mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505222)

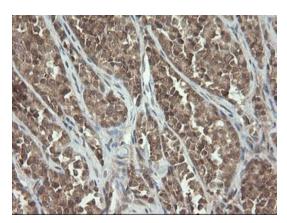




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-PIK3CG mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505222)

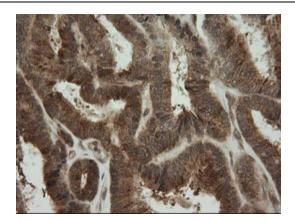


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PIK3CG mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505222)

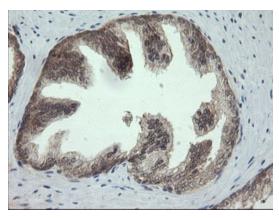


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-PIK3CG mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505222)





Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-PIK3CG mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505222)



Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-PIK3CG mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505222)