

# **Product datasheet for CF506011**

### OriGene Technologies, Inc.

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### PIK3C2B Mouse Monoclonal Antibody [Clone ID: OTI2G3]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI2G3

Applications: IF, IHC, WB

**Recommended Dilution:** WB 1:2000~4000, IHC 1:150, IF 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PIK3C2B(NP\_002637) 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.

**Gene Name:** phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 beta

Database Link: NP 002637

Entrez Gene 5287 Human

<u>O00750</u>





#### Background:

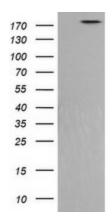
The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases. C2 domains act as calcium-dependent phospholipid binding motifs that mediate translocation of proteins to membranes, and may also mediate protein-protein interactions. The PI3-kinase activity of this protein is sensitive to low nanomolar levels of the inhibitor wortmanin. The C2 domain of this protein was shown to bind phospholipids but not Ca2+, which suggests that this enzyme may function in a calcium-independent manner. [provided by RefSeq, Jul 2008]

Synonyms: C2-PI3K

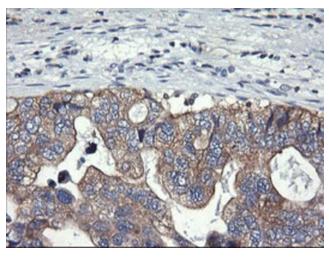
**Protein Families:** Druggable Genome

**Protein Pathways:** Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system

# **Product images:**

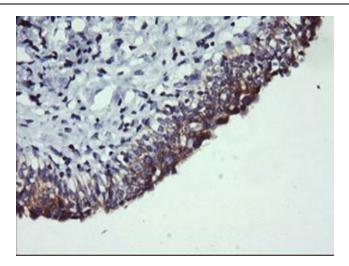


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PIK3C2B ([RC218354], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PIK3C2B. Positive lysates [LY419185] (100ug) and [LC419185] (20ug) can be purchased separately from OriGene.

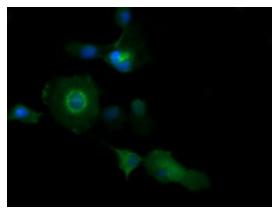


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-PIK3C2B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Immunohistochemical staining of paraffinembedded Human bladder tissue within the normal limits using anti-PIK3C2B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min



Anti-PIK3C2B mouse monoclonal antibody ([TA506011]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PIK3C2B ([RC218354]).