

# **Product datasheet for CF801696**

### OriGene Technologies, Inc.

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## PI 3 Kinase Class 2A (PIK3C2A) Mouse Monoclonal Antibody [Clone ID: OTI1B8]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1B8
Applications: IHC, WB

**Reactivity:** WB 1:2000, IHC 1:150 **Reactivity:** Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 230-560 of human

PIK3C2A (NP\_002636) produced in E.coli.

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: 190.5 kDa

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

Database Link: NP 002636

Entrez Gene 18704 MouseEntrez Gene 5286 Human

O00443





Background:

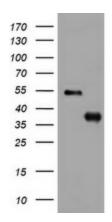
The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic 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 not sensitive to nanomolar levels of the inhibitor wortmanin. This protein was shown to be able to be activated by insulin and may be involved in integrin-dependent signaling. [provided by RefSeq, Jul 2008]

Synonyms: CPK; PI3-K-C2(ALPHA); PI3-K-C2A

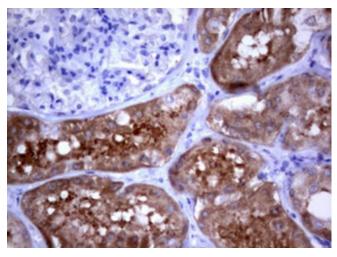
**Protein Families:** Druggable Genome

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

# **Product images:**

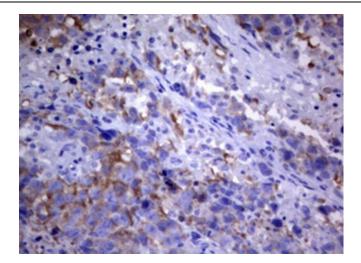


E.coli lysate (left lane) and E.coli lysate expressing human recombinant protein fragment corresponding to amino acids 230-560 of human PIK3C2A (NP\_002636) were separated by SDS-PAGE and immunoblotted with anti-PIK3C2A.

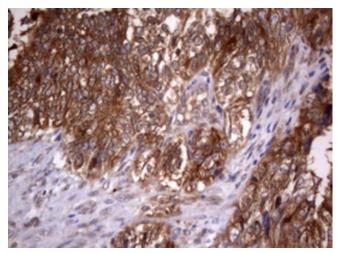


Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-PIK3C2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-PIK3C2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-PIK3C2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.