

# **Product datasheet for TA801694**

#### OriGene Technologies, Inc.

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### PI 3 Kinase Class 2A (PIK3C2A) Mouse Monoclonal Antibody [Clone ID: OTI3D9]

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3D9
Applications: IHC, WB

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

**Host:** Mouse Isotype: IgG2a

Clonality: Monoclonal

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

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

**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)

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

000443





Background:

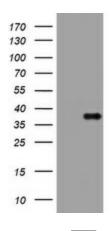
The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic 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

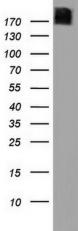
**Protein Families:** Druggable Genome

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

## **Product images:**

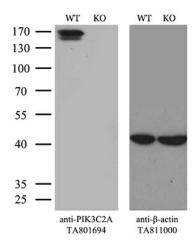


E.coli lysate (left lane) and E.coli lysate expressing human recombinant protein fragment corresponding to amino acids 230-560 of human PIK3C2A (NP\_002636) were separated by SDS-PAGE and immunoblotted with anti-PIK3C2A.

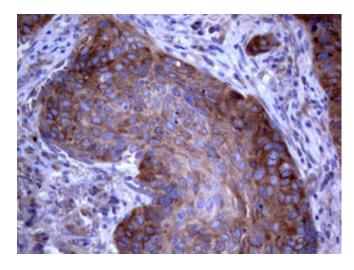


Western blot analysis of HT29 cell lysate (35ug) by using anti-PIK3C2A monoclonal antibody. Dilution: 1:500

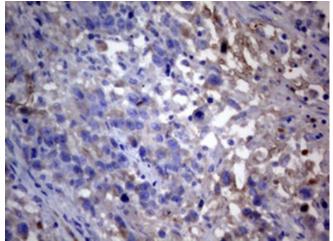




Equivalent amounts of cell lysates (10 ug per lane) of wild-type Hela cells (WT, Cat# LC810HELA) and PIK3C2A-Knockout Hela cells (KO, Cat# [LC810172]) were separated by SDS-PAGE and immunoblotted with anti-PIK3C2A monoclonal antibody TA801694. Then the blotted membrane was stripped and reprobed with anti-b-actin antibody ([TA811000]) as a loading control (1:500).

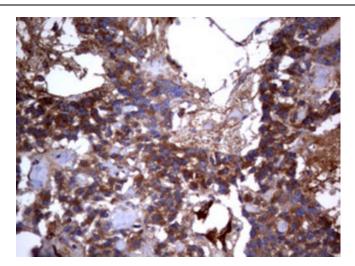


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-PIK3C2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



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