

## Product datasheet for **TA801694AM**

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

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3D9
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	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:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Biotin
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:	<a href="#">NP_002636</a> <a href="#">Entrez Gene 18704 Mouse</a> <a href="#">Entrez Gene 5286 Human</a> <a href="#">O00443</a>



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**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

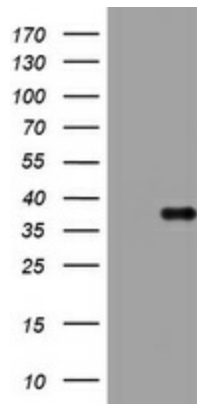
**Protein Families:**

Druggable Genome

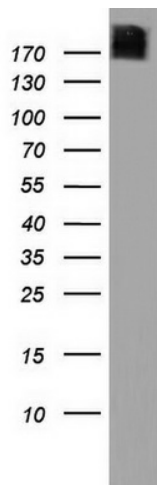
**Protein Pathways:**

Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system

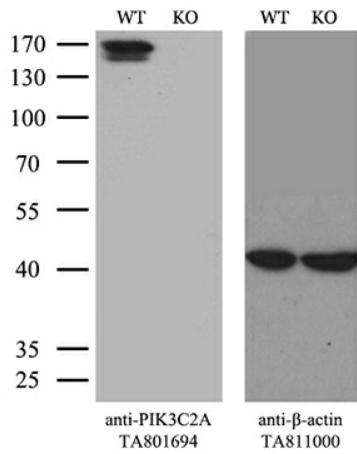
**Product images:**



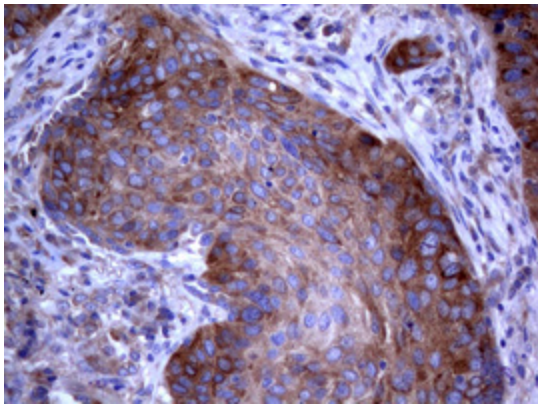
E.coli lysate (left lane) and E.coli lysate expressing human recombinant protein fragment corresponding to amino acids 230-560 of human PIK3C2A (NP\_002636) were separated by SDS-PAGE and immunoblotted with anti-PIK3C2A.



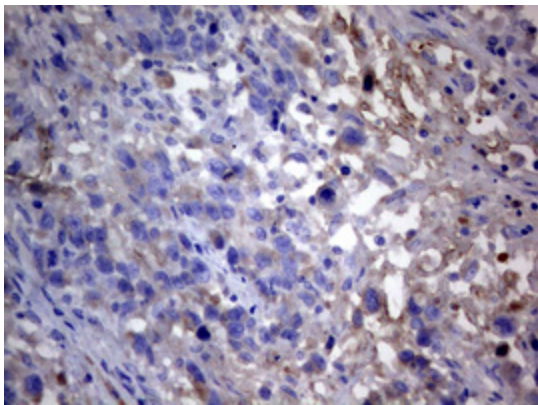
Western blot analysis of HT29 cell lysate (35ug) by using anti-PIK3C2A monoclonal antibody. Dilution: 1:500



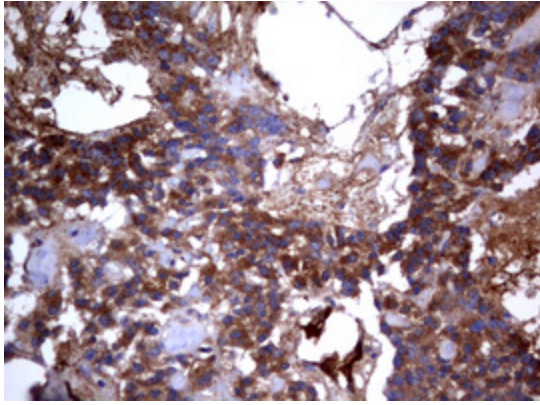
Equivalent amounts of cell lysates (10  $\mu$ g per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and PIK3C2A-Knockout HeLa cells (KO, Cat# [LC810172]) were separated by SDS-PAGE and immunoblotted with anti-PIK3C2A monoclonal antibody [TA801694]. Then the blotted membrane was stripped and reprobed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



Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-PIK3C2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, [TA801694])



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-PIK3C2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, [TA801694])



Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-PIK3C2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, [TA801694])