# [KD Validated] Anti-PIK3C2A Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M020500

## Product Information

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| Application | WB, FC, IF (Cell)/ICC |
| Reactivity | Human |
| Dilution | WB 1:500~1:2,500; FC 1:100~1:1,000; IF 1:100~1:1,000 |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone No. | 63K55S52 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | Recombinant protein of human PIK3C2A |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | [KD Validated] Anti-PIK3C2A Mouse mAb [63K55S52] is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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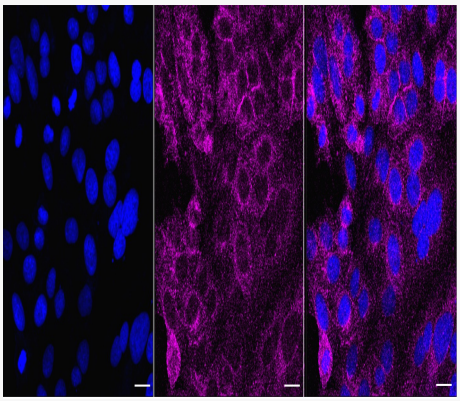
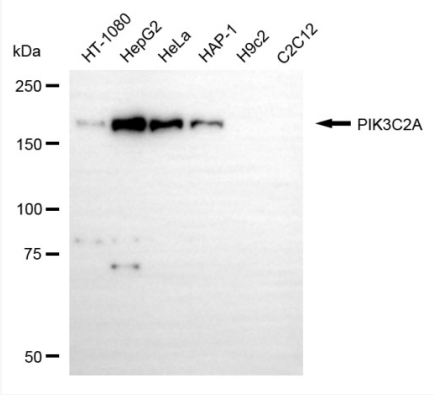
|---|---|
| Synonyms | PIK3C2A; Phosphatidylinositol-4-Phosphate 3-Kinase Catalytic Subunit Type 2 Alpha; Phosphatidylinositol 4-Phosphate 3-Kinase C2 Domain-Containing Subunit Alpha; PI3K-C2alpha; Phosphoinositide-3-Kinase, Class 2, Alpha Polypeptide; Phosphoinositide 3-Kinase-C2-Alpha; PtdIns-3-Kinase C2 Subunit Alpha; PI3K-C2-Alpha; EC 2.7.1.154; Phosphatidylinositol-4-Phosphate 3-Kinase C2 Domain-Containing Subunit Alpha; Phosphatidylinositol-4-Phosphate 3-Kinase, Catalytic Subunit Type 2 Alpha; C2-Containing Phosphatidylinositol Kinase; PI3-K-C2(ALPHA); EC 2.7.1.137; EC 2.7.1.153; PI3-K-C2A; EC 2.7.1; OCSKD; CPK. |
| Calculated MW | Calculated MW: 191 kDa; Observed MW: 191 kDa |
| Uniprot ID | O00443 |
| Gene ID | 5286 |
| 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. |

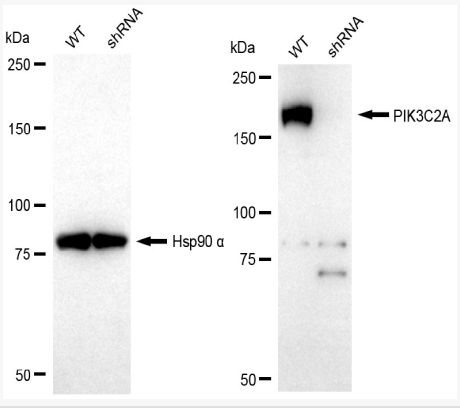
## Validation Images



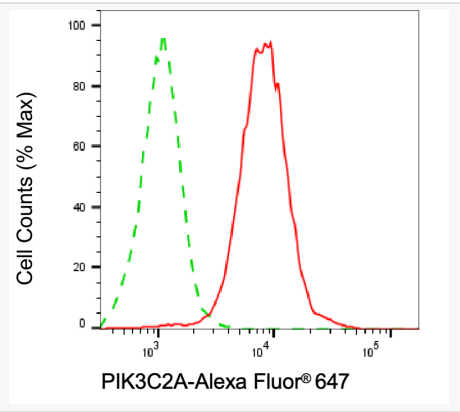
Immunocytochemical staining of HepG2 cells with PIK3C2A antibody (M020500, 1:1,000) . Nuclei were stained blue with DAPI; PIK3C2A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.




Western blotting analysis using PIK3C2A antibody (M020500). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PIK3C2A antibody (M020500, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.




Western blotting analysis using PIK3C2A antibody (M020500). PIK3C2A expression in wild-type (WT) and PIK3C2A shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PIK3C2A antibody (M020500, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.




Flow cytometric analysis of PIK3C2A expression in HepG2 cells using PIK3C2A antibody (M020500, 1:1,000). Green, isotype control; red, PIK3C2A.