

# Anti-PI 3 Kinase p85 alpha Antibody [A3-D0-R]

## HA601206



<b>Product Type:</b>	Recombinant Mouse monoclonal IgG1, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	WB, IF-Cell
<b>Molecular Wt:</b>	Predicted band size: 84 kDa
<b>Clone number:</b>	A3-D0-R

**Description:** Phosphatidylinositol 3-kinase (PI 3-kinase) is composed of (p85) and (p110) subunits. p85 lacks PI 3-kinase activity and acts as an adapter, coupling p110 to activated protein tyrosine kinase. Two forms of p85 have been described (p85 $\alpha$  and p85 $\beta$ ), each possessing one SH3 and two SH2 domains. Various p110 isoforms have been identified. p110 $\alpha$  and p110 $\beta$  interact with p85 $\alpha$ , and p110 $\alpha$  has also been shown to interact with p85 $\beta$  in vitro. p110 $\delta$  expression is restricted to white blood cells. It has been shown to bind p85 $\alpha$  and  $\gamma$ , but it apparently does not phosphorylate these subunits. p110 $\delta$  seems to have the capacity to autophosphorylate. p110 $\gamma$  does not interact with the p85 subunits. It has been shown to be activated by  $\alpha$  and  $\beta\gamma$  heterotrimeric G proteins.

**Immunogen:** Recombinant protein within Human PI3-kinase p85 subunit alpha aa 19-219 / 724.

**Positive control:** SW480 cell lysate, A431 cell lysate, 293T cell lysate, Jurkat cell lysate, Raji cell lysate, MCF7 cell lysate, A549 cell lysate, U-937.

**Subcellular location:** Cytosol, Membrane, Nucleus.

**Database links:** SwissProt: P27986 Human

**Recommended Dilutions:**

<b>WB</b>	1:2,000-1:5,000
<b>IF-Cell</b>	1:100

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

**Purity:** Protein A affinity purified.

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Orders: 0086-571-88062880

Technical: 0086-571-89986345

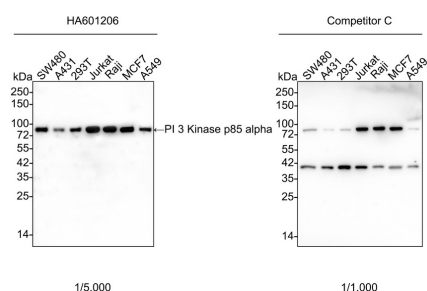
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Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

## Images

**Fig1:** Western blot analysis of PI 3 Kinase p85 alpha on different lysates with Mouse anti-PI 3 Kinase p85 alpha antibody (HA601206) at 1/5,000 dilution and competitor's antibody at 1/1,000 dilution.



Lane 1: SW480 cell lysate  
 Lane 2: A431 cell lysate  
 Lane 3: 293T cell lysate  
 Lane 4: Jurkat cell lysate  
 Lane 5: Raji cell lysate  
 Lane 6: MCF7 cell lysate  
 Lane 7: A549 cell lysate

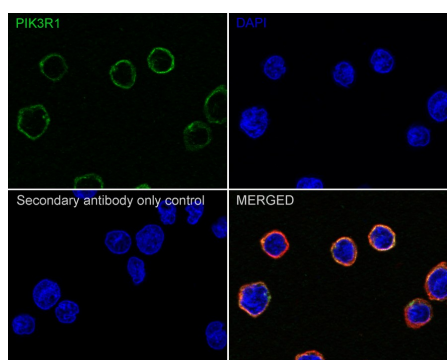
Lysates/proteins at 15 µg/Lane.

Predicted band size: 84 kDa  
 Observed band size: 84 kDa

Exposure time: 1 minute 40 seconds; ECL: K1802;  
 4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601206) at 1/5,000 dilution and competitor's antibody at 1/1,000 dilution were used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Immunocytochemistry analysis of U-937 cells labeling PI 3 Kinase p85 alpha with Mouse anti-PI 3 Kinase p85 alpha antibody (HA601206) at 1/100 dilution.



Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Mouse anti-PI 3 Kinase p85 alpha antibody (HA601206) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

beta Tubulin (ET1602-4, red) was stained at 1/100 dilution overnight at +4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) were used as the secondary antibody at 1/1,000 dilution.

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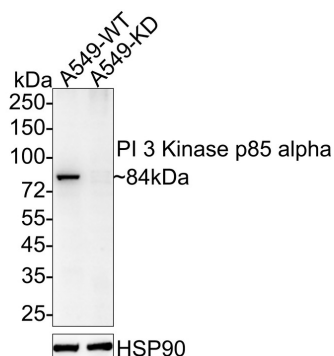
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**Fig3:** Western blot analysis of PI 3 Kinase p85 alpha on different lysates with Mouse anti-PI 3 Kinase p85 alpha antibody (HA601206) at 1/5,000 dilution.

Lane 1: A549-si NT cell lysate

Lane 2: A549-si PI 3 Kinase p85 alpha cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 84 kDa

Observed band size: 84 kDa

Exposure time: 2 minutes; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601206) at 1/5,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

### Background References

1. Hu J et al. Filamin B regulates chondrocyte proliferation and differentiation through Cdk1 signaling. PLoS One 9:e89352 (2014).
2. Schmidt JW et al. Stat5 regulates the phosphatidylinositol 3-kinase/Akt1 pathway during mammary gland development and tumorigenesis. Mol Cell Biol 34:1363-77 (2014).

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