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**Anti-PI3 Kinase p85**

Cat #: HM1285  
Rabbit polyclonal IgG  
0.2 µg/µl, store at 4 °C

For research use only

**BACKGROUND**

Phosphatidylinositol 3-kinase (PI3-kinase) phosphorylates at the D-3 position of the inositol ring of PI, PI-4- phosphate and PI-4,5-biphosphate (PI-4,5-P2) to produce their respective PI3-phosphorylated derivatives. The enzyme comprises a 110 kDa catalytic subunit (p110) and a regulatory subunit of 85 kDa (p85). The p85 subunit acts as an adapter, coupling p110 to activated protein tyrosine kinase. p85 subunit contains two SH2 domains and an SH3 domain. It associates with and serves as a substrate for activated growth factor receptor tyrosine kinases. Two forms of p85 have been described (p85 $\alpha$  and p85 $\beta$ ). Both isoforms bind to activated receptors and serve as tyrosine kinase substrates.

**SPECIFICITY**

This antibody specifically reacts with all p85 $\alpha$  and p85 $\beta$  subunits of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

**IMMUNOGEN**

A recombinant protein mapping at the amino terminal SH2 domain of the p85 $\alpha$  subunit of human PI3 kinase.

**STORAGE**

This antibody is stable for 12 months when stored at 2-8°C.

**REFERENCES**

1. Skolnik, E.Y., et al. 1991. Cloning of PI3 kinase-associated p85 utilizing a novel method for expression/cloning of target proteins for receptor tyrosine kinases. *Cell*. 65: 83-90.
2. Otsu, M., et al. 1991. Characterization of two 85 kd proteins that associate with receptor tyrosine kinases, middle-T/pp60-src complexes, and PI3-kinase. *Cell*. 65: 91-104.
3. Hiles, I.D., et al. 1992. Phosphatidylinositol 3-kinase: structure and expression of the 110 kDa catalytic subunit. *Cell*. 70: 419-429.
4. Hu, P., et al. 1993. Cloning of a novel, ubiquitously expressed human phosphatidylinositol 3-kinase and identification of its binding site on p85. *Mol. Cell. Biol.* 13: 7677-7688.
5. Vanhaesebroeck, B., et al. 1997. p110 $\delta$ , a novel phosphoinositide 3-kinase in leukocytes. *Proc. Natl. Acad. Sci. USA*. 94: 4330-4335.

6. Sun, M., Yang, L., Feldman, R.I., Sun, X.M., Bhalla, K.N., Jove, R., Nicosia, S.V. and Cheng, J.Q. (2003) Activation of phosphatidylinositol 3-kinase/Akt pathway by androgen through interaction of p85 $\alpha$ , androgen receptor, and Src. *J. Biol. Chem.* 278, 42992-43000.

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