

PI 3-kinase p110 (H-239): sc-7189

BACKGROUND

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 α and p85 β), each possessing one SH3 and two SH2 domains. Various p110 isoforms have been identified. p110 α and p110 β interact with p85 α , and p110 α has also been shown to interact with p85 β *in vitro*. p110 δ expression is restricted to white blood cells. It has been shown to bind p85 α and β , but it apparently does not phosphorylate these subunits. p110 δ seems to have the capacity to autophosphorylate. p110 γ does not interact with the p85 subunits. It has been shown to be activated by α and β heterotrimeric G proteins.

REFERENCES

- 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.
- Otsu, M., et al. 1991. Characterization of two 85 kDa proteins that associate with receptor tyrosine kinases, middle-T/pp60-src complexes, and PI3-kinase. *Cell* 65: 91-104.

SOURCE

PI 3-kinase p110 (H-239) is a rabbit polyclonal antibody raised against amino acids 800-1039 mapping at the C-terminus of PI 3-kinase p110 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PI 3-kinase p110 (H-239) is recommended for detection of PI 3-kinase p110 α , p110 β , p110 δ , and p110 γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PI 3-kinase p110 (H-239) is also recommended for detection of PI 3-kinase p110 α , p110 β , p110 δ , and p110 γ in additional species, including equine, canine, bovine and avian.

Molecular Weight of PI 3-kinase p110: 110 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or C32 whole cell lysate: sc-2205.

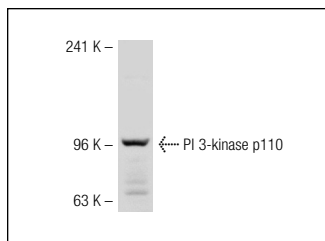
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



PI 3-kinase p110 (H-239): sc-7189. Western blot analysis of PI 3-kinase p110 expression in K-562 whole cell lysate.

SELECT PRODUCT CITATIONS

- Ueki, K., et al. 2001. Positive and negative regulation of phosphoinositide 3-kinase-dependent signaling pathways by three different gene products of the p85 α regulatory subunit. *Mol. Cell. Biol.* 20: 8035-8046.
- Reyes-Reyes, M., et al. 2001. Phosphatidylinositol 3-kinase mediates integrin-dependent NF κ B and MAPK activation through separate signaling pathways. *J. Cell Sci.* 114: 1579-1589.
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- Chen, T., et al. 2011. Experimental therapy of ovarian cancer with synthetic makaluvamine analog: *in vitro* and *in vivo* anticancer activity and molecular mechanisms of action. *PLoS ONE* 6: e20729.
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Try **PI 3-kinase p110 (D-4): sc-8010**, our highly recommended monoclonal alternative to PI 3-kinase p110 (H-239).