

PI 3-kinase p85 α (Z-8): sc-423

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 PI 3-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 PI 3-kinase. *Cell* 65: 91-104.

SOURCE

PI 3-kinase p85 α (Z-8) is a rabbit polyclonal antibody raised against amino acids 333-430 of PI 3-kinase p85 α 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.

Available as agarose (sc-423 AC) conjugate for immunoprecipitation, 500 μ g/0.25 ml agarose in 1 ml.

APPLICATIONS

PI 3-kinase p85 α (Z-8) is recommended for detection of PI 3-kinase p85 α , p85 β and p55 PIK of mouse, rat, human and *Xenopus laevis* 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 p85 α (Z-8) is also recommended for detection of PI 3-kinase p85 α , p85 β and p55 PIK in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of PI 3-kinase p85 α : 85 kDa.

Positive Controls: PI 3-kinase p85 α (m): 293T Lysate: sc-122557, Caki-1 cell lysate: sc-2224 or PI 3-kinase p85 β (h): 293T Lysate: sc-112567.

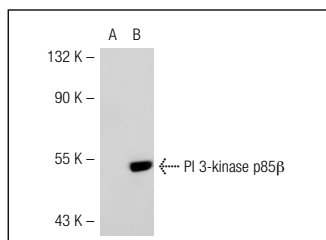
STORAGE

Store at 4 $^{\circ}$ C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

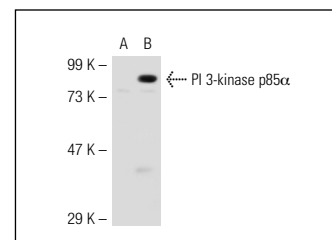
RESEARCH USE

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

DATA



PI 3-kinase p85 α (Z-8): sc-423. Western blot analysis of PI 3-kinase p85 β expression in non-transfected: sc-117752 (A) and human PI 3-kinase p85 β transfected: sc-112567 (B) 293T whole cell lysates.



PI 3-kinase p85 α (Z-8): sc-423. Western blot analysis of PI 3-kinase p85 α expression in non-transfected: sc-117752 (A) and mouse PI 3-kinase p85 α transfected: sc-122557 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Sizemore, N., et al. 1999. Activation of phosphatidylinositol 3-kinase in response to interleukin-1 leads to phosphorylation and activation of the NF κ B p65/RelA subunit. *Mol. Cell. Biol.* 19: 4798-4805.
- Terruzzi, I., et al. 2010. Insulin-mimetic action of conglutin- γ , a lupin seed protein, in mouse myoblasts. *Nutr. Metab. Cardiovasc. Dis.* 21: 197-205.
- Lu, D.Y., et al. 2010. Bradykinin-induced cell migration and COX-2 production mediated by the bradykinin B1 receptor in glioma cells. *J. Cell. Biochem.* 110: 141-150.
- Piro, S., et al. 2010. Palmitate affects Insulin receptor phosphorylation and intracellular Insulin signal in a pancreatic α -cell line. *Endocrinology* 151: 4197-4206.
- Heldsinger, A., et al. 2011. Synergistic interaction between leptin and cholecystokinin in the rat nodose ganglia is mediated by PI3K and STAT3 signaling pathways: implications for leptin as a regulator of short term satiety. *J. Biol. Chem.* 286: 11707-11715.
- 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.
- Ma, Y., et al. 2012. Toll-like receptor (TLR) 2 and TLR4 differentially regulate doxorubicin induced cardiomyopathy in mice. *PLoS ONE* 7: e40763.
- Soares, V.M., et al. 2012. Early life overfeeding decreases acylated ghrelin circulating levels and upregulates GHSR1a signaling pathway in white adipose tissue of obese young mice. *Regul. Pept.* 174: 6-11.

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Try **PI 3-kinase p85 α / β / γ (D-9): sc-374534** or **PI 3-kinase p85 α (C-1): sc-376112**, our highly recommended monoclonal alternatives to PI 3-kinase p85 α (Z-8). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **PI 3-kinase p85 α / β / γ (D-9): sc-374534**.