

PI 3-kinase p85 α (m): 293T Lysate: sc-122557

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

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 kDa 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. Stoyanov, B., et al. 1995. Cloning and characterization of a G protein-activated human phosphoinositide-3 kinase. *Science* 269: 690-693.
6. Vanhaesebroeck, B., et al. 1997. p110 δ , a novel phosphoinositide 3-kinase in leukocytes. *Proc. Natl. Acad. Sci. USA* 94: 4330-4335.

CHROMOSOMAL LOCATION

Genetic locus: Pik3r1 (mouse) mapping to 13 D1.

PRODUCT

PI 3-kinase p85 α (m): 293T Lysate represents a lysate of mouse PI 3-kinase p85 α transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PI 3-kinase p85 α (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PI 3-kinase p85 α antibodies. Recommended use: 10-20 μ l per lane.

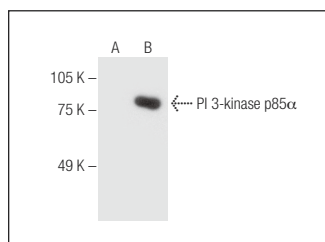
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PI 3-kinase p85 α (D-3): sc-377482 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PI 3-kinase p85 α expression in PI 3-kinase p85 α transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

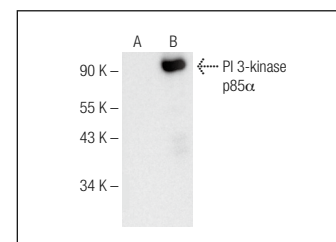
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PI 3-kinase p85 α (D-3): sc-377482. 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.



PI 3-kinase p85 α (C-1): sc-376112. 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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.