

# PI 3-kinase p85 $\beta$ (N-14): sc-131325

## BACKGROUND

Phosphatidylinositol 3-kinase (PI 3-kinase) is composed of p85 and p110 subunits. p85 lacks PI 3-kinase activity and acts as an adaptor, 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 p85 $\beta$ , 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.

## CHROMOSOMAL LOCATION

Genetic locus: PIK3R2 (human) mapping to 19p13.11; Pik3r2 (mouse) mapping to 8 B3.3.

## SOURCE

PI 3-kinase p85 $\beta$  (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PI 3-kinase p85 $\beta$  of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-131325 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

PI 3-kinase p85 $\beta$  (N-14) is recommended for detection of PI 3-kinase p85 $\beta$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for PI 3-kinase p85 $\beta$  siRNA (h): sc-39125, PI 3-kinase p85 $\beta$  siRNA (m): sc-39126, PI 3-kinase p85 $\beta$  siRNA (r): sc-156022, PI 3-kinase p85 $\beta$  shRNA Plasmid (h): sc-39125-SH, PI 3-kinase p85 $\beta$  shRNA Plasmid (m): sc-39126-SH, PI 3-kinase p85 $\beta$  shRNA Plasmid (r): sc-156022-SH, PI 3-kinase p85 $\beta$  shRNA (h) Lentiviral Particles: sc-39125-V, PI 3-kinase p85 $\beta$  shRNA (m) Lentiviral Particles: sc-39126-V and PI 3-kinase p85 $\beta$  shRNA (r) Lentiviral Particles: sc-156022-V.

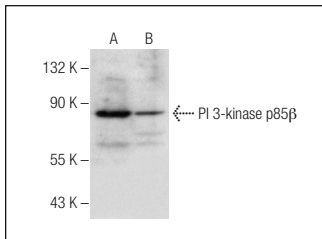
Molecular Weight of PI 3-kinase p85 $\beta$ : 85 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



PI 3-kinase p85 $\beta$  (N-14): sc-131325. Western blot analysis of PI 3-kinase p85 $\beta$  expression in BJAB (A) and K-562 (B) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **PI 3-kinase p85 $\beta$  (T15): sc-56934**, our highly recommended monoclonal alternative to PI 3-kinase p85 $\beta$  (N-14).