

# PI 3-kinase p101 (E-14): sc-168954

## BACKGROUND

PI 3-kinase p101 is an 880 amino acid protein that acts as a regulatory subunit of the PI3 kinase  $\gamma$  complex. PI 3-kinase p101 interacts with PI 3-kinase p110 $\gamma$  to form the PI3 kinase  $\gamma$  complex, which is activated by  $G_{\beta\gamma}$  proteins and plays a role in many physiological processes, such as cardiac function, neutrophil chemotaxis and mast cell degranulation. Specifically, the PI3 kinase  $\gamma$  complex is involved in suppression of apoptosis, cellular transport and cell motility. Binding of the PI 3-kinase p110 $\gamma$  subunit to PI 3-kinase p101 is dependent on the N-terminal region of PI 3-kinase p101. With highest expression in leukocytes, spleen lymph node thymus and bone marrow, PI 3-kinase p101 is subcellularly located in the nucleus, cytoplasm, or it can exist as a peripheral membrane protein. There are two isoforms of PI 3-kinase p101 that are produced as a result of alternative splicing.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PIK3R5 (human) mapping to 17p13.1; Pik3r5 (mouse) mapping to 11 B3.

## SOURCE

PI 3-kinase p101 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PI 3-kinase p101 of human origin.

## RESEARCH USE

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

## 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-168954 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PI 3-kinase p101 (E-14) is recommended for detection of PI 3-kinase p101 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other PI 3-kinase p family members.

PI 3-kinase p101 (E-14) is also recommended for detection of PI 3-kinase p101 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PI 3-kinase p101 siRNA (h): sc-94221, PI 3-kinase p101 siRNA (m): sc-152242, PI 3-kinase p101 shRNA Plasmid (h): sc-94221-SH, PI 3-kinase p101 shRNA Plasmid (m): sc-152242-SH, PI 3-kinase p101 shRNA (h) Lentiviral Particles: sc-94221-V and PI 3-kinase p101 shRNA (m) Lentiviral Particles: sc-152242-V.

Molecular Weight of PI 3-kinase p101: 101 kDa.

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

## 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) 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.

## STORAGE

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

## PROTOCOLS

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



Try **PI 3-kinase p101 (E-12): sc-390916**, our highly recommended monoclonal alternative to PI 3-kinase p101 (E-14).