

PI 3-kinase C2 γ (H-194): sc-134767

BACKGROUND

Phosphoinositide 3-kinases (PI 3-Ks) phosphorylate the 3'-OH position of the inositol ring of inositol lipids. They act as participants in signaling pathways that regulate cell growth by virtue of their activation in response to various mitogenic stimuli. PI 3-Ks are composed of a catalytic subunit, such as PI 3-kinase C2 β (PIK3CB) and an adaptor subunit. PI 3-kinase C2 β , also known as p110- β , is a 1,070 amino acid protein that shares 42% identity with p110 of bovine origin. It is expressed in several human and rodent cell lines. Studies predict that PI 3-kinase C2 β has a role in modulating the formation and stability of α 2B (ITGA2B)/ β 3 (ITGB3) Integrin adhesion bonds, which are essential in shear force-induced platelet activation.

REFERENCES

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- Jackson, S.P., et al. 2005. PI 3-kinase p110 β : a new target for antithrombotic therapy. *Nat. Med.* 11: 507-514.

CHROMOSOMAL LOCATION

Genetic locus: PIK3C2G (human) mapping to 12p12.3.

SOURCE

PI 3-kinase C2 γ (H-194) is a rabbit polyclonal antibody raised against amino acids 1177-1370 mapping near the C-terminus of PI 3-kinase C2 γ 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.

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.

APPLICATIONS

PI 3-kinase C2 γ (H-194) is recommended for detection of PI 3-kinase C2 γ of 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 C2 γ (H-194) is also recommended for detection of PI 3-kinase C2 γ in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for PI 3-kinase C2 γ siRNA (h): sc-61338, PI 3-kinase C2 γ shRNA Plasmid (h): sc-61338-SH and PI 3-kinase C2 γ shRNA (h) Lentiviral Particles: sc-61338-V.

Molecular Weight of PI 3-kinase C2 γ : 185 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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