SANTA CRUZ BIOTECHNOLOGY, INC.

Reg IIIα/γ (H-69): sc-134854

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The regeneration (Reg) family consists of secretory proteins involved in liver, pancreatic, gastric and intestinal cell proliferation or differentiation. Members of the Reg family are divided into four subclasses, designated types I, II, III and IV, all of which share a common gene structure containing five introns and six exons. Members of the Reg family have been implicated in the regulation of cell growth, tumorigenesis and the progression of cancer. Reg IIIγ (regenerating islet-derived 3 γ), also known as pancreatitis-associated protein 1B, PAP1B, or UNQ429, is a 175 amino acid secreted protein that is expressed almost exclusively in pancreas, with low levels of expression in testis. Reg IIIγ functions as an antimicrobial protein involved in controlling bacterial proliferation and may be induced during acute pancreatitis. The gene encoding Reg IIIγ maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: REG3A/REG3G (human) mapping to 2p12.

RESEARCH USE

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

SOURCE

Reg IIIα/γ (H-69) is a rabbit polyclonal antibody raised against amino acids 107-175 mapping at the C-terminus of Reg IIIα of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Reg IIIα/γ (H-69) is recommended for detection of Reg IIIα and Reg IIIγ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Molecular Weight of Reg IIIα: 19 kDa.

Molecular Weight of Reg IIIγ: 16 kDa.

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.

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 or our catalog for detailed protocols and support products.