SANTA CRUZ BIOTECHNOLOGY, INC.

collectrin (P-13): sc-135465

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Collectrin, also known as TMEM27 (transmembrane protein 27) or NX17, is a 222 amino acid single-pass type I membrane protein belonging to the TMEM27 family. Collectrin interacts with Snapin to regulate SNARE complex function, which in turn controls Insulin exocytosis. Collectrin has been found to stimulate β cell replication and plays a role in renal amino acid uptake. Localizing to luminal surface and cytoplasm of renal collecting ducts of the cortex and medulla, collectrin is also found in β cells of pancreatic islets, where its extracellular domain becomes cleaved following translation and is released from the cell membrane. Collectrin exists as a homodimer, undergoes post-translational glycosylation and interacts with XTRP2. The gene encoding collectrin maps to human chromosome Xp22.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TMEM27 (human) mapping to Xp22.2; Tmem27 (mouse) mapping to X F5.

SOURCE

collectrin (P-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of collectrin of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135465 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

collectrin (P-13) is recommended for detection of collectrin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

collectrin (P-13) is also recommended for detection of collectrin in additional species, including bovine.

Suitable for use as control antibody for collectrin siRNA (h): sc-90959, collectrin siRNA (m): sc-142481, collectrin shRNA Plasmid (h): sc-90959-SH, collectrin shRNA Plasmid (m): sc-142481-SH, collectrin shRNA (h) Lentiviral Particles: sc-90959-V and collectrin shRNA (m) Lentiviral Particles: sc-142481-V.

Molecular Weight of collectrin: 32 kDa.

Positive Controls: mouse kidney extract: sc-2255, mouse liver extract: sc-2256 or mouse pancreas extract: sc-364244.

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.

RESEARCH USE

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

PROTOCOLS

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