# collectrin (I-14): sc-135464



The Boures to Overtion

## **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  $\beta$  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  $\beta$  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.

# **REFERENCES**

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### CHROMOSOMAL LOCATION

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

# **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.

#### **SOURCE**

collectrin (I-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of collectrin of human origin.

#### **PRODUCT**

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135464 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

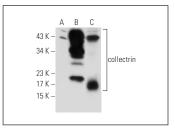
collectrin (I-14) is recommended for detection of collectrin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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: collectrin (h): 293T Lysate: sc-116311, mouse pancreas extract: sc-364244 or mouse kidney extract: sc-2255.

## DATA



collectrin (I-14): sc-135464. Western blot analysis of collectrin expression in non-transfected: sc-117752 (A) and human collectrin transfected: sc-116311 (B) 293T whole cell lysates and mouse kidney tissue extract (C).

# **PROTOCOLS**

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