BACKGROUND

Receptor activity-modifying proteins (RAMPs) are transmembrane accessory proteins that influence the pharmacological profiles of the calcitonin receptor-like receptors (CRLR). RAMPs associate with CRLR in the endoplasmic reticulum and facilitate the glycosylation and transport of CRLR to the cell surface, where the mature protein then operates as a receptor for two structurally related vasodilatory peptides, calcitonin-gene-related peptide (CGRP) or adrenomedullin (ADM). RAMP1 associating with CRLR confers a CGRP receptor, while RAMP2 and RAMP3 preferentially induce a responsiveness to ADM. RAMP proteins, including RAMP1, RAMP2 and RAMP3, are structurally similar as they are type I receptors, which have a single extracellular N-terminus and a cytoplasmic C-terminus, and they share approximately 55% sequence similarity. RAMP1 expression is highest in the uterus, brain and gastrointestinal tract, whereas RAMP2 and RAMP3 are highest in lung, breast and fetal tissues.

REFERENCES


SELECT PRODUCT CITATIONS


APPLICATIONS

RAMP3 (H-125) is recommended for detection of RAMP3 of mouse, rat and 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).

Suitable for use as control antibody for RAMP3 siRNA (h): sc-40896, RAMP3 siRNA (m): sc-40897, RAMP3 shRNA Plasmid (h): sc-40896-SH, RAMP3 shRNA Plasmid (m): sc-40897-SH, RAMP3 shRNA (h) Lentiviral Particles: sc-40896-V and RAMP3 shRNA (m) Lentiviral Particles: sc-40897-V.

CHROMOSOMAL LOCATION

Genetic locus: RAMP3 (human) mapping to 7p13; Ramp3 (mouse) mapping to 11 A1.

SOURCE

RAMP3 (H-125) is a rabbit polyclonal antibody raised against amino acids 15-139 mapping near the N-terminus of RAMP3 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.

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.

PROTOCOLS

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