

Anti-SCTR Picoband Antibody

Catalog # ABO11714

Specification

Anti-SCTR Picoband Antibody - Product Information

Application WB
Primary Accession P47872
Host Reactivity Human, Rat
Clonality Polyclonal
Format Lyophilized

Description

Rabbit IgG polyclonal antibody for Secretin receptor(SCTR) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SCTR Picoband Antibody - Additional Information

Gene ID 6344

Other Names

Secretin receptor, SCT-R, SCTR

Calculated MW 50207 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization

Cell membrane; Multi-pass membrane protein.

Protein Name Secretin receptor

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human SCTR (398-440aa EVQKKWQQWHLREFPLHPVASFSNSTKASHLEQSQGTCRTSII).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.



Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-SCTR Picoband Antibody - Protein Information

Name SCTR

Function

Receptor for secretin (SCT), which is involved in different processes such as regulation of the pH of the duodenal content, food intake and water homeostasis (PubMed:7612008, PubMed:7612008, PubMed:25332973). The activity of this receptor is mediated by G proteins which activate adenylyl cyclase (By similarity). Upon binding to secretin, regulates the pH of the duodenum by (1) inhibiting the secretion of gastric acid from the parietal cells of the stomach and (2) stimulating the production of bicarbonate (NaHCO(3)) from the ductal cells of the pancreas (By similarity). In addition to regulating the pH of the duodenal content, plays a central role in diet induced thermogenesis: acts as a non-sympathetic brown fat (BAT) activator mediating prandial thermogenesis, which consequentially induces satiation. Mechanistically, secretin released by the gut after a meal binds to secretin receptor (SCTR) in brown adipocytes, activating brown fat thermogenesis by stimulating lipolysis, which is sensed in the brain and promotes satiation. Also able to stimulate lipolysis in white adipocytes. Also plays an important role in cellular osmoregulation by regulating renal water reabsorption. Also plays a role in the central nervous system: required for synaptic plasticity (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P23811}; Multi-pass membrane protein

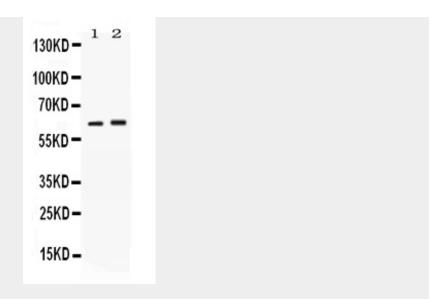
Anti-SCTR Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-SCTR Picoband Antibody - Images





Western blot analysis of SCTR expression in rat kidney extract (lane 1) and SKOV3 whole cell lysates (lane 2). SCTR at 59KD was detected using rabbit anti- SCTR Antigen Affinity purified polyclonal antibody (Catalog # ABO11714) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-SCTR Picoband Antibody - Background

Human secretin receptor (gene name SCTR) is a G protein-coupled receptor and belongs to the glucagon-VIP-secretin receptor family. It binds secretin which is the most potent regulator of pancreatic bicarbonate, electrolyte and volume secretion. Secretin and its receptor are suggested to be involved in pancreatic cancer and autism. The SCTR gene is mapped to chromosome 2q14.1 by fluorescence in situ hybridization.