

Anti-Secretin Receptor Antibody

Rabbit polyclonal antibody to Secretin Receptor Catalog # AP60629

Specification

Anti-Secretin Receptor Antibody - Product Information

Application WB, IF Primary Accession P47872

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 50207

Anti-Secretin Receptor Antibody - Additional Information

Gene ID 6344

Other Names

Secretin receptor; SCT-R

Target/Specificity

Recognizes endogenous levels of Secretin Receptor protein.

Dilution

WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IF~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Secretin Receptor 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:25332973, PubMed:7612008). The activity of

href="http://www.uniprot.org/citations/7612008" target="_blank">7612008). 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





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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

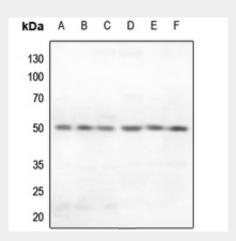
Cell membrane {ECO:0000250|UniProtKB:P23811}; Multi-pass membrane protein

Anti-Secretin Receptor Antibody - Protocols

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

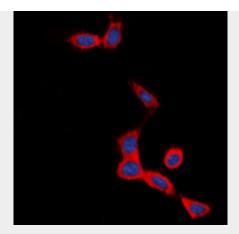
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Secretin Receptor Antibody - Images



Western blot analysis of Secretin Receptor expression in HEK293T (A), Hela (B), H460 (C), mouse lung (D), mouse kidney (E), rat kidney (F) whole cell lysates.





Immunofluorescent analysis of Secretin Receptor staining in SHSY5Y cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Anti-Secretin Receptor Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Secretin Receptor. The exact sequence is proprietary.