

# Secretin Receptor Polyclonal Antibody

Catalog # AP72413

### Specification

# Secretin Receptor Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF <u>P47872</u> Human Rabbit Polyclonal

## Secretin Receptor Polyclonal Antibody - Additional Information

Gene ID 6344

**Other Names** SCTR; Secretin receptor; SCT-R

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

## Secretin Receptor Polyclonal Antibody - Protein Information

Name SCTR (HGNC:10608)

#### Function

G protein-coupled receptor activated by secretin (SCT), which is involved in different processes such as regulation of the pH of the duodenal content, food intake and water homeostasis (PubMed:<a href="http://www.uniprot.org/citations/25332973" target="\_blank">25332973</a>, PubMed:<a href="http://www.uniprot.org/citations/25332973" target="\_blank">25332973</a>, PubMed:<a href="http://www.uniprot.org/citations/32811827" target="\_blank">32811827</a>, PubMed:<a href="http://www.uniprot.org/citations/33008599" target="\_blank">3008599</a>, PubMed:<a href="http://www.uniprot.org/citations/7612008" target="\_blank">7612008</a>). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and activates cAMP-dependent pathway (PubMed:<a href="http://www.uniprot.org/citations/32811827" target="\_blank">32811827</a>, PubMed:<a href="http://www.uniprot.org/citations/32811827" target="\_blank">33008599</a>, DubMed:<a href="http://www.uniprot.org/citations/32811827" target="\_blank">32811827</a>, PubMed:<a href="http://www.uniprot.org/citations/32811827" target="\_blank">33008599</a>, DubMed:<a href="http://www.uniprot.org/citations/33008599" target="\_blank">33008599</a>, DubMed:<a hr



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:Q5FWI2}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q5FWI2}; Multi-pass membrane protein

## Secretin Receptor Polyclonal Antibody - Protocols

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

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

#### Secretin Receptor Polyclonal Antibody - Images







# Secretin Receptor Polyclonal Antibody - Background

This is a receptor for secretin. The activity of this receptor is mediated by G proteins which activate adenylyl cyclase.