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# Anti-Secretin Receptor Antibody

Catalog # AP60629

## Product Information

| | |
|---|---|
| **Application** | WB, IHC, IF/IC |
| **Primary Accession** | P47872 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 50207 |

## Additional Information

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|---|---|
| **Gene ID** | 6344 |
| **Other Names** | Secretin receptor; SCT-R |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Secretin Receptor. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IHC~~1:100~500 IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

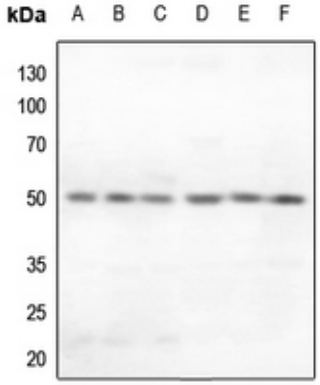
| | |
|---|---|
| **Name** | SCTR ( HGNC:10608) |
| **Function** | G protein-coupled receptor activated by secretin (SCT), which is involved in different processes such as regulation of the pH of the duodenal content, food intake and water homeostasis (PubMed:25332973, PubMed:32811827, PubMed:33008599, PubMed:7612008). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and activates cAMP-dependent pathway (PubMed:32811827, PubMed:33008599). 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).

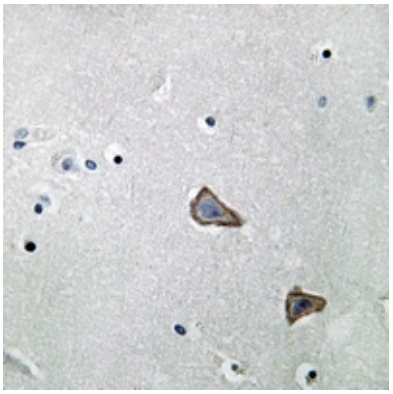
**Cellular Location**

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

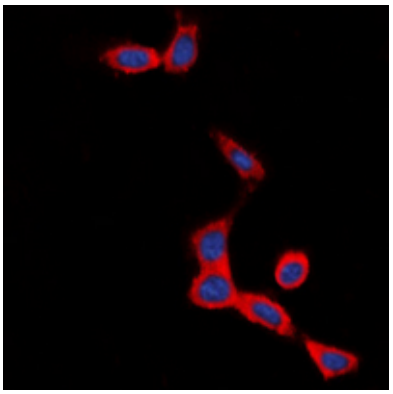
## Images




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. (Predicted band size: 50 kD; Observed band size: 50 kD)



Immunohistochemical analysis of Secretin Receptor staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.