

Anti-Secretin Receptor Antibody

Rabbit polyclonal antibody to Secretin Receptor

Catalog # AP60629

Product Information

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

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/IC~~N/A
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

Protein Information

Name	SCTR (HGNC:10608)
Function	<p>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 (NaHCO₃) 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</p>

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).

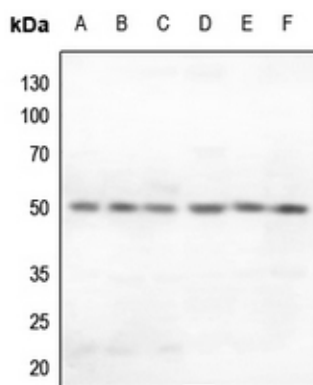
Cellular Location

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

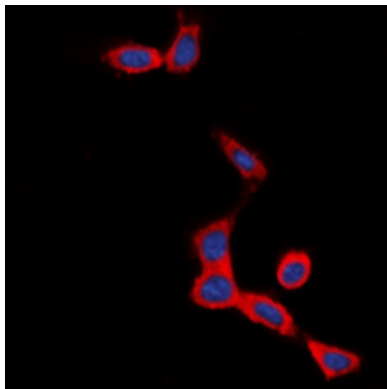
Background

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

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 humidified 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).

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