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Secretin Receptor Polyclonal Antibody

Catalog # AP72413

Product Information

Application	WB, IHC-P, IF
Primary Accession	P47872
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50207

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

Protein Information

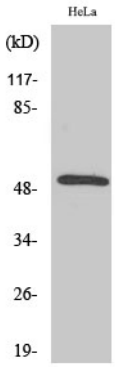
Name	SCTR (HGNC:10608)
Function	G protein-coupled receptor activated by secretin (SCT), which is involved in different processes such as regulation of the pH of the duodenal content, food intake and water homeostasis (PubMed:25332973, PubMed:32811827, PubMed:33008599, PubMed:7612008). Ligand binding 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

Background

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

Images



Western Blot analysis of various cells using Secretin Receptor Polyclonal Antibody diluted at 1：1000