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Anti-SCTR Picoband Antibody

Catalog # ABO11714

Product Information

Application	WB
Primary Accession	P47872
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Secretin receptor(SCTR) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6344
Other Names	Secretin receptor, SCT-R, SCTR
Calculated MW	50207
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Cell membrane; Multi-pass membrane protein.
Source	Eukaryota
Protein Name	Secretin receptor
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SCTR (398-440aa EVQKKWQQWHLREFPLHPVASFSNSTKASHLEQSQGTCRTSII).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

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

Human secretin receptor (gene name SCTR) is a G protein-coupled receptor and belongs to the glucagon-VIP-secretin receptor family. It binds secretin which is the most potent regulator of pancreatic bicarbonate, electrolyte and volume secretion. Secretin and its receptor are suggested to be involved in pancreatic cancer and autism. The SCTR gene is mapped to chromosome 2q14.1 by fluorescence in situ hybridization.

Images



Western blot analysis of SCTR expression in rat kidney extract (lane 1) and SKOV3 whole cell lysates (lane 2). SCTR at 59KD was detected using rabbit anti- SCTR Antigen Affinity purified polyclonal antibody (Catalog # ABO11714) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

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