

secretin (H-89): sc-20938

BACKGROUND

Secretin is a 27 amino acid hormone produced by specific endocrine cells, S cells, located in the mucosa of the proximal small intestine. Secretin is known to be a potent stimulus for the secretion of bicarbonate-rich pancreatic juice. Secretion of secretin is stimulated by the presence of either acidic pH or fatty acids in the duodenum. Secretin is synthesized as a larger precursor. The deduced amino acid sequence included a signal peptide, an amino-terminal peptide, secretin itself and a 72 amino acid carboxy-terminal peptide. Secretin stimulates ductal bile secretion by directly interacting with cholangiocytes. It stimulates exocytosis in cholangiocytes, which transport water mainly via the water channel aquaporin-1. Secretin deficiency may be implicated in autistic syndrome, suggesting that the hormone could have a neuroendocrine function in addition to its role in digestion. The gene which encodes secretin maps to human chromosome 11p15.5.

REFERENCES

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3. Kopin, A.S., Wheeler, M.B. and Leiter, A.B. 1990. Secretin: structure of the precursor and tissue distribution of the mRNA. *Proc. Natl. Acad. Sci. USA* 87: 2299-2303.
4. Marinelli, R.A., Pham, L., Agre, P. and LaRusso, N.F. 1997. Secretin promotes osmotic water transport in rat cholangiocytes by increasing aquaporin-1 water channels in plasma membrane. Evidence for a secretin-induced vesicular translocation of aquaporin-1. *J. Biol. Chem.* 272: 12984-12988.
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CHROMOSOMAL LOCATION

Genetic locus: SCT (human) mapping to 11p15.5; Sct (mouse) mapping to 7 F5.

SOURCE

secretin (H-89) is a rabbit polyclonal antibody raised against amino acids 33-121 mapping at the C-terminus of secretin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

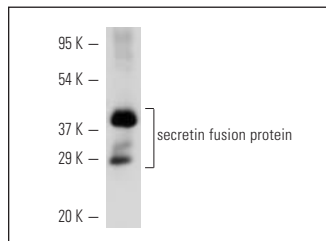
secretin (H-89) is recommended for detection of secretin precursor and active peptide of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for secretin siRNA (h): sc-39534.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



secretin (H-89): sc-20938. Western blot analysis of human recombinant secretin fusion protein.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.