

Secretoneurin (L-18): sc-54326

BACKGROUND

Secretoneurin-2 (Sg II), also known as SCG2, Chromogranin-C or CHGC, is a 617 amino acid precursor protein that is cleaved to produce a 32 amino acid active peptide known as Secretoneurin (or SN). Secretoneurin is a secreted peptide that is thought to exert chemotactic effects on specific cells, indicating a possible role in cellular movement in response to environmental stimuli. The gene encoding the Secretoneurin-2 precursor maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the chromosome 2-localized ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes, which also map to chromosome 2.

REFERENCES

1. Gerdes, H.H., et al. 1989. The primary structure of human Secretogranin-2, a widespread tyrosine-sulfated secretory granule protein that exhibits low pH- and calcium-induced aggregation. *J. Biol. Chem.* 264: 12009-12015.
2. Giudici, A.M., et al. 1992. Immuno-localization of Secretogranin-2, chromogranin A, and chromogranin B in differentiating human neuroblastoma cells. *Eur. J. Cell Biol.* 58: 383-389.
3. Vallet, V.S., et al. 1997. Secretogranin-2 (Sg II) distribution and processing studies in human normal and adenomatous anterior pituitaries using new polyclonal antibodies. *Regul. Pept.* 68: 155-163.
4. Duzendorfer, S., et al. 1998. Secretoneurin, a novel neuropeptide, is a potent chemo-attractant for human eosinophils. *Blood* 91: 1527-1532.
5. Anouar, Y., et al. 1998. Identification of a novel Secretogranin-2-derived peptide (Sg II(187-252)) in adult and fetal human adrenal glands using antibodies raised against the human recombinant peptide. *J. Clin. Endocrinol. Metab.* 83: 2944-2951.
6. Scammell, J.G., et al. 2000. Isolation and characterization of the human Secretogranin-2 gene promoter. *Brain Res. Mol. Brain Res.* 75: 8-15.
7. Kähler, C.M., et al. 2002. Transendothelial migration of leukocytes and signalling mechanisms in response to the neuropeptide Secretoneurin. *Regul. Pept.* 105: 35-46.

CHROMOSOMAL LOCATION

Genetic locus: SCG2 (human) mapping to 2q36.1; Scg2 (mouse) mapping to 1 C4.

SOURCE

Secretoneurin (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of secretogranin II 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.

Blocking peptide available for competition studies, sc-54326 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Secretoneurin (L-18) is recommended for detection of secretoneurin and secretogranin II of mouse, rat and 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).

Secretoneurin (L-18) is also recommended for detection of secretoneurin and secretogranin II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sg II siRNA (h): sc-39381, Sg II siRNA (m): sc-39382, Sg II shRNA Plasmid (h): sc-39381-SH, Sg II shRNA Plasmid (m): sc-39382-SH, Sg II shRNA (h) Lentiviral Particles: sc-39381-V and Sg II shRNA (m) Lentiviral Particles: sc-39382-V.

Molecular Weight of Sg II precursor: 71 kDa.

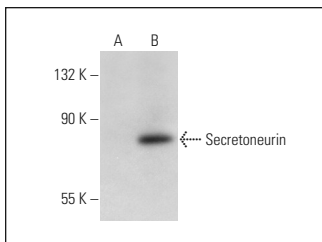
Molecular Weight of Secretoneurin: 4 kDa.

Positive Controls: Sg II (m): 293T Lysate: sc-123519.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Secretoneurin (L-18): sc-54326. Western blot analysis of Secretoneurin expression in non-transfected: sc-117752 (A) and mouse Sg II transfected: sc-123519 (B) 293T whole cell lysates.

STORAGE

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

RESEARCH USE

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