

Sg III (H-300): sc-50289

BACKGROUND

Chromogranins (secretogranins) are acidic glycoproteins that localize within secretory granules of endocrine, neuroendocrine and neuronal tissue. Family members include chromogranin A, chromogranin B (secretogranin I) chromogranin C and secretogranin III (SCG3, Sg III). High levels of chromogranin A expression is a characteristic of neuro-endocrine tumors. Pancreastatin is a peptide derived from chromogranin A which inhibits Insulin secretion, exocrine pancreatic secretion and gastric acid secretion. Sg III is an acidic secretory protein expressed in neuronal and endocrine cells. In the anterior lobe of the rat pituitary gland, Sg III is present in mammatropes and thyrotropes, moderately in gonadotropes and corticotropes, though not in somatotropes. Sg III and carboxypeptidase E (CPE) bind specifically to cholesterol-rich secretory granule (SG) membranes.

REFERENCES

- Giudici, A.M., et al. 1992. Immunolocalization of secretogranin II, chromogranin A, and chromogranin B in differentiating human neuroblastoma cells. *Eur. J. Cell Biol.* 58: 383-389.
- Robberecht, P., et al. 1993. Current status on chromogranin A and pancreastatin. *Acta Gastroenterol. Belg.* 56: 261-263.

CHROMOSOMAL LOCATION

Genetic locus: SCG3 (human) mapping to 15q21.2; Scg3 (mouse) mapping to 9 D.

SOURCE

Sg III (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Sg III 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.

APPLICATIONS

Sg III (H-300) is recommended for detection of Secretogranin III 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).

Sg III (H-300) is also recommended for detection of Secretogranin III in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sg III siRNA (h): sc-39383, Sg III siRNA (m): sc-39384, Sg III shRNA Plasmid (h): sc-39383-SH, Sg III shRNA Plasmid (m): sc-39384-SH, Sg III shRNA (h) Lentiviral Particles: sc-39383-V and Sg III shRNA (m) Lentiviral Particles: sc-39384-V.

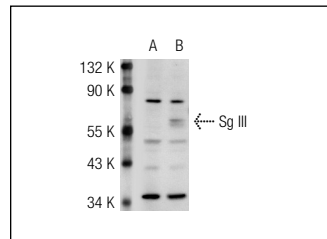
Molecular Weight of Sg III: 53.2 kDa.

Positive Controls: Sg III (m): 293T Lysate: sc-123520.

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



Sg III (H-300): sc-50289. Western blot analysis of Sg III expression in non-transfected: sc-117752 (A) and mouse Sg III transfected: sc-123520 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Li, F., et al. 2012. Dysregulated expression of secretogranin III is involved in neurotoxin-induced dopaminergic neuron apoptosis. *J. Neurosci. Res.* 90: 2237-2246.

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.

PROTOCOLS

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


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Try **Sg III (C-2): sc-271750**, our highly recommended monoclonal alternative to Sg III (H-300).