

# Sg III (C-19): sc-1492

## 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 neuroendocrine 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Sg III (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-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.

Blocking peptide available for competition studies, sc-1492 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Sg III (C-19) 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), immunohistochemistry (including paraffin-embedded sections) (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 (C-19) 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 endogenous Sg III: 53 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

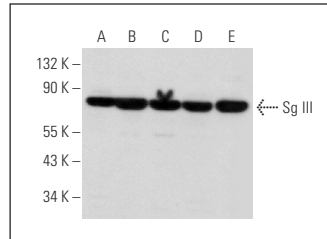
## STORAGE

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

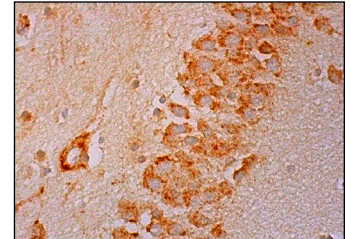
## RESEARCH USE

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

## DATA



Sg III (C-19): sc-1492. Western blot analysis of Sg III expression in HeLa (A), Jurkat (B), K-562 (C), Hep G2 (D) and NIH/3T3 (E) whole cell lysates.



Sg III (C-19): sc-1492. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells and glial cells.

## SELECT PRODUCT CITATIONS

- Coppinger, J.A., et al. 2004. Characterization of the proteins released from activated platelets leads to localization of novel platelet proteins in human atherosclerotic lesions. *Blood* 103: 2096-2104.
- Tanabe, A., et al. 2007. Functional single-nucleotide polymorphisms in the secretogranin III (SCG3) gene that form secretory granules with appetite-related neuropeptides are associated with obesity. *J. Clin. Endocrinol. Metab.* 92: 1145-1154.
- Yang, P.Y., et al. 2010. Activity-based proteome profiling of potential cellular targets of orlistat—an FDA-approved drug with anti-tumor activities. *J. Am. Chem. Soc.* 132: 656-666.
- Baranda-Avila, N., et al. 2013. Agonistic activity of ICI 182 780 on activation of GSK 3β/AKT pathway in the rat uterus during the estrous cycle. *Steroids* 78: 717-725.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Sg III (C-2): sc-271750**, our highly recommended monoclonal alternative to Sg III (C-19).