# SANTA CRUZ BIOTECHNOLOGY, INC.

# Chr-B (C-16): sc-18235



# BACKGROUND

Chromogranins (secretogranins) are acidic glycoproteins that localize within secretory granules of endocrine, neuroendocrine and neuronal tissue. Family members include chromogranin A (Chr-A), chromogranin B (Chr-B, also known as secretogranin I) chromogranin C (also known as secretogranin II or Sg II), secretogranin III (Sg III or SCG3). High levels of Chr-A expression is a characteristic of neuroendocrine tumors. Pancreastatin is a peptide derived from Chr-A which inhibits Insulin secretion, exocrine pancreatic secretion and gastric acid secretion. Pancreastatin exists as two forms; the major form is expressed in stomach and colon extracts. In neuroendocrine cells the level Sg II has been shown to increase four-fold in response to histamine, while levels of Chr-A and Chr-B showed little or no increase. 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 mammotropes 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: CHGB (human) mapping to 20p12.3; Chgb (mouse) mapping to 2 F2.

## SOURCE

Chr-B (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Chr-B of human origin.

### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-18235 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# APPLICATIONS

Chr-B (C-16) is recommended for detection of chromogranin-B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Chr-B (C-16) is also recommended for detection of chromogranin-B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Chr-B siRNA (h): sc-39374, Chr-B siRNA (m): sc-39375, Chr-B shRNA Plasmid (h): sc-39374-SH, Chr-B shRNA Plasmid (m): sc-39375-SH, Chr-B shRNA (h) Lentiviral Particles: sc-39374-V and Chr-B shRNA (m) Lentiviral Particles: sc-39375-V.

Molecular Weight of Chr-B: 76/110 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182 or PC-12 cell lysate: sc-2250.

#### **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) Immunofluo-rescence: 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

#### DATA





Chr-B (C-16): sc-18235. Western blot analysis of Chr-B expression in PC-12 whole cell lysate.

Chr-B (C-16): sc-18235. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans.

#### SELECT PRODUCT CITATIONS

 Connolly, R., et al. 2007. Cox-2 promotes chromogranin A expression and bioactivity: evidence for a prostaglandin E2-dependent mechanism and the involvement of a proximal cAMP-responsive element. Endocrinology 148: 4310-4317.

#### **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.

## MONOS Satisfation Guaranteed

Try **Chr-B (32): sc-135867**, our highly recommended monoclonal aternative to Chr-B (C-16).