

Chr-B (C-19): sc-1489

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 SGG3). 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-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Chr-B of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1489 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Chr-B (C-19) 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), 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).

Chr-B (C-19) is also recommended for detection of Chr-B in additional species, including equine, 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.

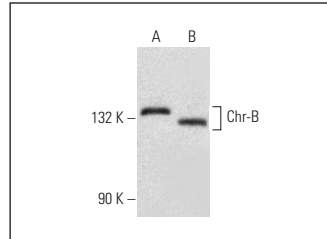
Molecular Weight of Chr-B: 76/110 kDa.

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

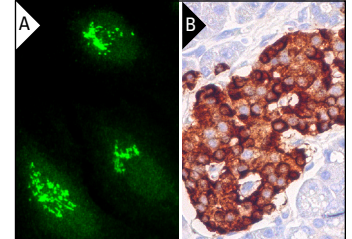
STORAGE

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

DATA



Chr-B (C-19): sc-1489. Western blot analysis of Chr-B expression in 293T (A) and AML-193 (B) whole cell lysates.



Chr-B (C-19): sc-1489. Immunofluorescence staining of formalin-fixed HeLa cells showing centrosome localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans (B).

SELECT PRODUCT CITATIONS

- Huttunen, H.J., et al. 2002. Receptor for advanced glycation end products (RAGE) signaling induces CREB-dependent chromogranin expression during neuronal differentiation. *J. Biol. Chem.* 277: 38635-38646.
- Cohen, H., et al. 2003. Acetylation of the C terminus of Ku70 by CBP and PCAF controls Bax-mediated apoptosis. *Mol. Cell* 13: 627-638.
- Yuan, T.C., et al. 2006. Androgen deprivation induces human prostate epithelial neuroendocrine differentiation of androgen-sensitive LNCaP cells. *Endocr. Relat. Cancer* 13: 151-167.
- Biswas, N., et al. 2010. Chromogranin/secretogranin proteins in murine heart: myocardial production of chromogranin A fragment catestatin (Chga[364-384]). *Cell Tissue Res.* 342: 353-361.
- Rosjo, H., et al. 2010. Chromogranin B in heart failure: a putative cardiac biomarker expressed in the failing myocardium. *Circ. Heart Fail.* 3: 503-511.

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.



Try **Chr-B (32): sc-135867**, our highly recommended monoclonal alternative to Chr-B (C-19).