

Chr-A (H-300): sc-13090

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 of 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 primarily expressed in mammotropes and thyrotropes, moderately expressed in gonadotropes and corticotropes, and not detected in somatotropes. Sg III and carboxypeptidase E (CPE) bind specifically to cholesterol-rich secretory granule (SG) membranes.

CHROMOSOMAL LOCATION

Genetic locus: CHGA (human) mapping to 14q32.12; Chga (mouse) mapping to 12 E.

SOURCE

Chr-A (H-300) is a rabbit polyclonal antibody raised against amino acids 158-457 of Chr-A 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

Chr-A (H-300) is recommended for detection of Chr-A 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).

Suitable for use as control antibody for Chr-A siRNA (h): sc-37212, Chr-A siRNA (m): sc-37213, Chr-A shRNA Plasmid (h): sc-37212-SH, Chr-A shRNA Plasmid (m): sc-37213-SH, Chr-A shRNA (h) Lentiviral Particles: sc-37212-V and Chr-A shRNA (m) Lentiviral Particles: sc-37213-V.

Molecular Weight of Chr-A: 68-80 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, Hep G2 cell lysate: sc-2227 or SH-SY5Y cell lysate: sc-3812.

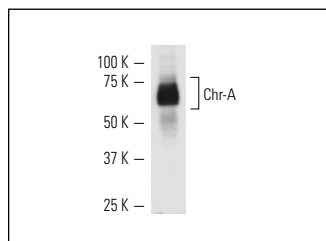
STORAGE

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

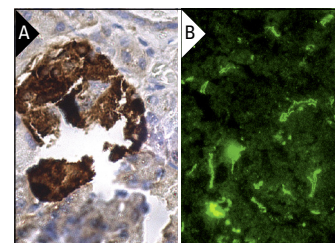
RESEARCH USE

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

DATA



Chr-A (H-300): sc-13090. Western blot analysis of Chr-A expression in nocodazole-treated SH-SY5Y whole cell lysate.



Chr-A (H-300): sc-13090. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans (A). Immunofluorescence staining of normal mouse liver frozen section showing extra-cellular staining (B).

SELECT PRODUCT CITATIONS

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- Sato, T., et al. 2009. Single Lgr5 stem cells build crypt-villus structures *in vitro* without a mesenchymal niche. *Nature* 459: 262-265.
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- 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.
- Matsuoka, H., et al. 2011. Differential distribution of synaptotagmin-1, -4, -7, and -9 in rat adrenal chromaffin cells. *Cell Tissue Res.* 344: 41-50.
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- Kosinsky, R.L., et al. 2015. Usp22 deficiency impairs intestinal epithelial lineage specification *in vivo*. *Oncotarget* 6: 37906-37918.



Try **Chr-A (C-12): sc-393941** or **Chr-A (E-5): sc-271738**, our highly recommended monoclonal alternatives to Chr-A (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Chr-A (C-12): sc-393941**.