

# Chr-A (I-16): sc-23556

## 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.

## 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.
- Schmid, K.W., et al. 1993. Chromogranin A, secretogranin II and vasoactive intestinal peptide in pheochromocytomas and ganglioneuromas. *Histopathology* 22: 527-533.

## CHROMOSOMAL LOCATION

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

## SOURCE

Chr-A (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Chromogranin-A precursor 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-23556 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

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

## APPLICATIONS

Chr-A (I-16) is recommended for detection of precursor and mature Chr-A and the processed active peptides vasostatin I and II 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); non cross-reactive with the processed active peptide EA-92 or ES-43.

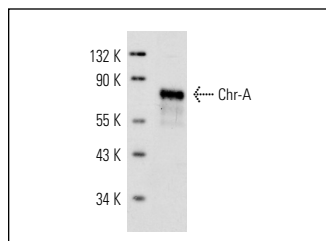
Chr-A (I-16) is also recommended for detection of precursor and mature Chr-A and the processed active peptides Vasostatin I and II in additional species, including equine, canine, bovine, porcine and avian.

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: Jurkat whole cell lysate: sc-2204, Hep G2 cell lysate: sc-2227 or SK-N-SH cell lysate: sc-2410.

## DATA



Chr-A (I-16): sc-23556. Western blot analysis of purified bovine Chr-A.

## SELECT PRODUCT CITATIONS

- Hong, M.C., et al. 2009. ApRab3, a biosynthetic Rab protein, accumulates on the maturing phagosomes and symbiosomes in the tropical sea anemone, *Aiptasia pulchella*. *Comp. Biochem. Physiol. B, Biochem. Mol. Biol.* 152: 249-259.

## RESEARCH USE

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



Try **Chr-A (C-12): sc-393941** or **Chr-A (E-5): sc-271738**, our highly recommended monoclonal alternatives to Chr-A (I-16). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Chr-A (C-12): sc-393941**.