

## Product Information

### Anti-Chromogranin-A antibody produced in rabbit affinity isolated antibody

Catalog Number **SAB4200668**

#### Product Description

Anti-Chromogranin-A is produced in rabbit using as immunogen a synthetic peptide corresponding to the GR-44 peptide in the C-terminal region of human Chromogranin-A (GeneID: 1113), conjugated to KLH. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Chromogranin-A recognizes human Chromogranin-A. The antibody may be used in various immunochemical techniques including immunohistochemistry. Detection of the Chromogranin-A staining by immunohistochemistry is specifically inhibited by the immunizing peptide.

The preproprotein Chromogranin-A (CgA or CHGA) also known as Pituitary secretory protein I (SP-I) is a member of the granin family of proteins. It is stored in cytoplasmic secretory granules of the neuroendocrine system, mainly in the adrenal gland where it represents ~50% of the granule soluble protein contents.

Chromogranin-A undergoes proteolytic cleavage into 11 peptide chains including biologically active peptides such as Vasostatin, Pancreastatin, Parastatin and Serpinin. Following secretory stimulation, these peptides are released to extracellular space. Chromogranin-A is a multifunctional protein that was suggested as a marker of the sympatho-adrenal neuroendocrine (SAN) activity on the endocrine, cardiovascular, metabolic and immune systems.<sup>1-5</sup> Furthermore, its plasma levels were elevated in 60% to 100% in Neuroendocrine Tumours (NET) patients, suggesting its role as a promising biomarker. Indeed, Chromogranin-A blood levels were correlated with tumor mass and burden as well as with the progression and malignant nature of the tumor. When treated with somatostatin analogs, the patients Chromogranin-A levels were reduced.<sup>5</sup>

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

Immunohistochemistry: a working concentration of 5-10 µg/mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded human pancreas sections.

**Note:** In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

#### References

1. Tota, B., et al., *Front. Chem.*, **2**, 64 (2014).
2. Bartolomucci, A., et al., *Endocr. Rev.*, **32**, 755–797 (2011).
3. Orr, D., et al., *Proteomics*, **2**, 1586-1600 (2002).
4. D'amico, M.A., et al., *Endocr. Connect.*, **3**, R45-54 (2014).
5. Vinik, A.I., et al., *Pancreas*, **39**, 713-734 (2010).

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