

## Product Information

**Anti-Chromogranin-A antibody, Mouse monoclonal**  
clone CHGA(419), purified from hybridoma cell culture

Product Number **SAB4200728**

### Product Description

Anti-Chromogranin-A antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the CHGA(419) hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with synthetic peptide corresponding to the C-terminal region of human Chromogranin-A protein (GeneID 1113), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti-Chromogranin-A antibody specifically recognizes human Chromogranin-A. The antibody may be used in various immunochemical assays, including Immunoblot (~50 kDa) and Immunohistochemistry.

Chromogranin-A protein, also known as CgA, pituitary secretory protein I (SP-1), parathyroid secretory protein 1 or CHGA, is the major member of the granin family of acidic secretory glycoproteins that are expressed in all endocrine and neuroendocrine cells. Chromogranin-A has a crucial intracellular role in secretory granule biogenesis and calcium homeostasis.<sup>1</sup> The protein is located in neuroendocrine cells distributed throughout the body, including the neuroendocrine cells of the large and small intestine, adrenal medulla and pancreatic islets and the secretory vesicles of neurons.<sup>2</sup> Tissue-specific and context-specific proteolytic cleavage of Chromogranin-A yields polypeptides with paracrine and endocrine activity including: vasostatin, pancreastatin, catestatin, parastatin, chromostatin, GE-25 and WE-14.<sup>3</sup> Chromogranin-A-related polypeptides can also influence fibroblast adhesion, endothelial and VSMC proliferation and migration, endothelial response to inflammatory stimuli, cardiac function and vascular tone.<sup>4</sup>

Increased blood levels of Chromogranin-A have been shown in numerous inflammatory and non-inflammatory conditions, including neuroendocrine tumours (carcinoid tumors, pheochromocytomas, paragangliomas and others), renal failure, arterial hypertension, chronic heart failure and rheumatoid arthritis.<sup>4-5</sup>

Co-expression of Chromogranin A and neuron specific enolase (NSE) is common in neuroendocrine neoplasms.<sup>6</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 Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

Store at -20 °C. 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

Immunoblotting: a working concentration of 10-20 µg/ml is recommended using human embryonic kidney 293T cell extract.

Immunohistochemistry: a working concentration of 10-20 µg/ml is recommended using heat-retrieved formalin-fixed, paraffin-embedded human stomach sections.

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

### References

1. Helle KB., et al., *Cell Mol Life Sci.*, **64**, 2863-86 (2007).

2. Pieroni M., et al., *Eur Heart J.*, **28**, 1117-27 (2007).
3. Tombetti E., et al., *Arthritis Res Ther.*, **18**, 187 (2016).
4. D'Amico MA., et al., *Endocr Connect.*, **3**, R45-54 (2014).
5. Di Comite G., et al., *J Leukoc Biol.*, **85**, 81-7 (2009).
6. Baudin E., et al., *Br J Cancer*, **78**, 1102-7 (1998).

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