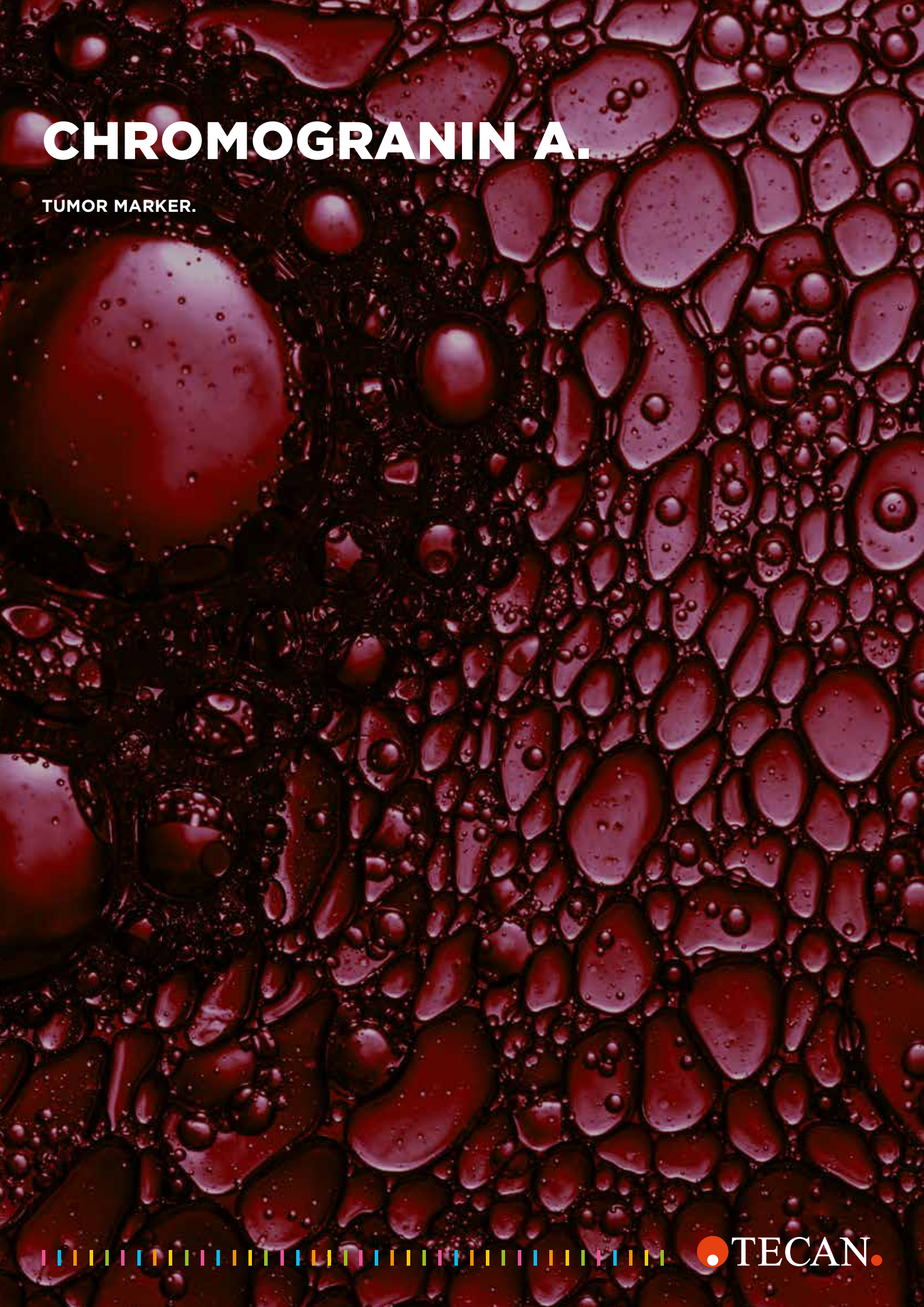


CHROMOGRANIN A.

TUMOR MARKER.

TECAN.

THE BEST MARKER FOR DIAGNOSIS OF NET.

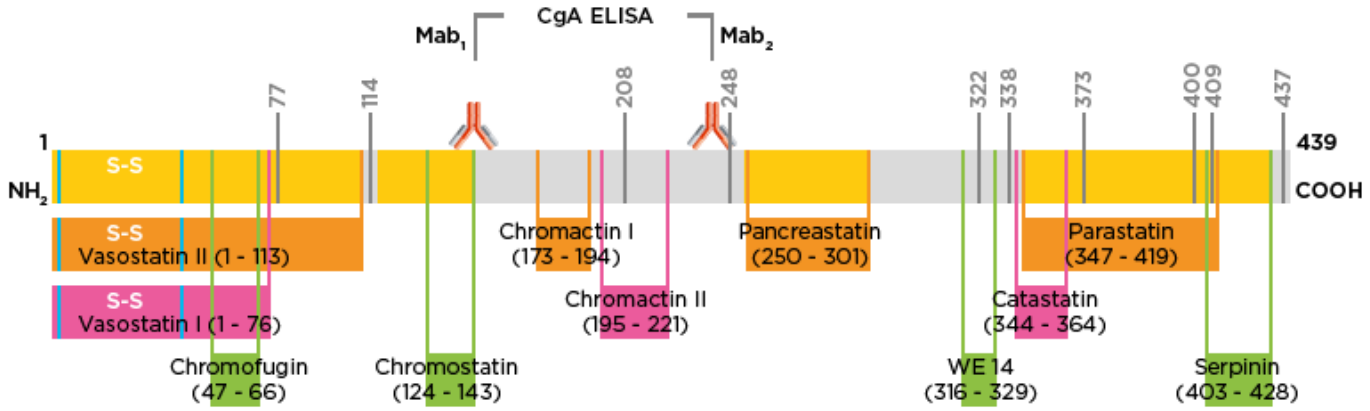
The Chromogranin A ELISA shows high specificity and sensitivity for different neuroendocrine tumors (NET) due to monoclonal antibodies directed against the central domain of molecule, which corresponds to the unprocessed central domain.

Chromogranin A origin and metabolism

Chromogranin A (CgA) is thought to act as a pro-hormone. Its proteolysis is a key component of its physiology. This degradation releases different biologically active peptides (for example: vasostatins, chromostatin, pancreastatin, parastatin), which possess different paracrine and autocrine functions. These peptides are not specific to NET-patients.

This proteolysis is tissue-specific and fragmentation of the protein is different, depending on its location. It primarily takes place in the cell, inside chromaffin granules. In immunohistochemistry, the presence of CgA in tumor cells is suggestive of a neuroendocrine origin of the tumor.

Human CgA molecule sequence



Normal values measured with the Chromogranin A ELISA (30208352)

Circulating CgA exists in healthy subjects and the values obtained are independent of age and gender. Apparently healthy 101 subjects tested in the Chromogranin A ELISA showed serum values between 23 and 101 ng/mL, with a median of 56 ng/mL (95th percentiles).

Clinical importance

Chromogranin A represents the best available biomarker[1] for diagnosis of neuroendocrine tumors (NETs) with clinical prognostic relevance, like for pheochromocytoma and carcinoids tumors.

The measurement of Chromogranin A is indicated as an aid in the diagnosis of patients with neuroendocrine tumors, e.g. gastroentero-pancreatic neuroendocrine tumors (GEP-NETs)[2,3], in conjunction with clinical evaluation.

Chromogranin A ELISA

The CE IVDD Chromogranin A ELISA (Ordering Number: 30208352) uses monoclonal antibodies that specifically recognize the central part of the molecule (Amino acids: 145-245), which corresponds to the unprocessed central domain. The kit measures intact and fragmented circulating CgA.

This design is key for

- High specificity for NET patients
- Reliable and consistent results: standards based on human recombinant CgA
- High precision < 10% CV
- Excellent correlation to the gold Standard CgA RIA and other Random Access devices on the market

PRODUCTS

30208352
Chromogranin A ELISA

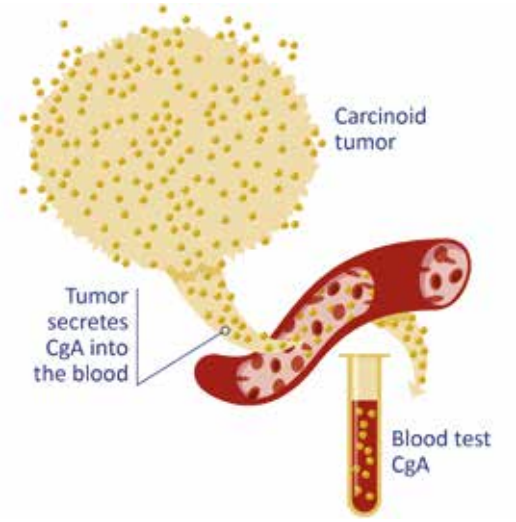
RELATED PRODUCTS

RE59395
TriCat (Adrenalin, Noradrenalin, Dopamine) ELISA

RE59202
MetCombi Plasma ELISA

RE59181
Metanephrine Urine ELISA

RE59171
Normetanephrine Urine ELISA



Inter-Assay Precision

Level	Number of Samples	Concentration ng/mL	%CV
1	34	81,6	6,43
2	36	122	4,68
3	31	182	4,13
4	35	407	3,19
5	36	445	3,98
6	35	632	4,73

Intra-Assay Precision

Level	Number of Samples	Concentration ng/mL	%CV
1	28	51,3	11,5
2	28	187	6,4
3	28	442	6,8
4	20	697	7,0

Automation

The Chromoganin A ELISA is semi-automated and will require general-purpose laboratory instruments. Furthermore, the assay can be easily automated on open ELISA systems like the Freedom Evolyzer®. However, the combined use of assays, process script and instrument has to be validated individually on site by each laboratory.

References

1. Modlin IM, Gustafsson BI, Moss SF, Pavel M, Tsolakis AV, Kidd M. Chromogranin A--biological function and clinical utility in neuro endocrine tumor disease. Ann Surg Oncol. 2010 Sep;17(9):2427-43. doi: 10.1245/s10434-010-1006-3. Epub 2010 Mar 9. PMID: 20217257.
2. Ardill, Joy & Erikkson, B. (2004). The importance of the measurement of circulating markers in patients with neuroendocrine tumours of the pancreas and gut. Endocrine-related cancer. 10. 459-62. 10.1677/erc.0.0100459.
3. Bryan Oronsky, Patrick C. Ma, Daniel Morgensztern, Corey A. Carter, Nothing But NET: A Review of Neuroendocrine Tumors and Carcinomas, Neoplasia, Volume 19, Issue 12, 2017, Pages 991-1002, ISSN 1476-5586, https://doi.org/10.1016/j.neo.2017.09.002.

Supplied by:

Oxford BioSystems

Tel: +44 (0)1235 431390
sales@oxfordbiosystems.com
www.oxfordbiosystems.com

LEARN MORE

Distributed by
IBL International GmbH
Flughafenstrasse 52a
22335 Hamburg
Germany

Phone: +49 (0)40-53 28 91-0
Fax: +49 (0)40-53 28 91-11
Email: IBL@Tecan.com
www.tecan.com/ibl

Australia +61 3 9647 4100 **Austria** +43 62 46 89 330 **Belgium** +32 15 42 13 19 **China** +86 21 220 63 206 **France** +33 4 72 76 04 80 **Germany** +49 79 51 94 170
Italy +39 02 92 44 790 **Japan** +81 44 556 73 11 **Netherlands** +31 18 34 48 17 4 **Nordic** +46 8 750 39 40 **Singapore** +65 644 41 886 **Spain** +34 93 595 25 31
Switzerland +41 44 922 89 22 **UK** +44 118 9300 300 **USA** +1 919 361 5200 **Other countries** +41 44 922 81 11

www.tecan.com

FL 403228 V1.0 en, 2025

TECAN.