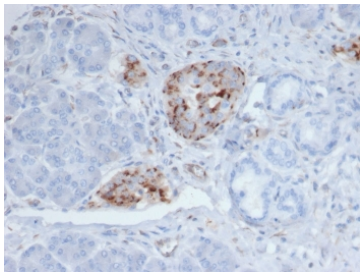
Chromogranin A Antibody Protein Microarray Validated [clone CHGA/4219] (V9364)

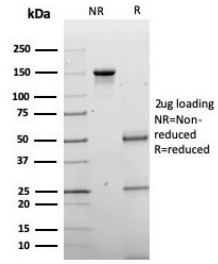
Catalog No.	Formulation	Size
V9364-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9364-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9364SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

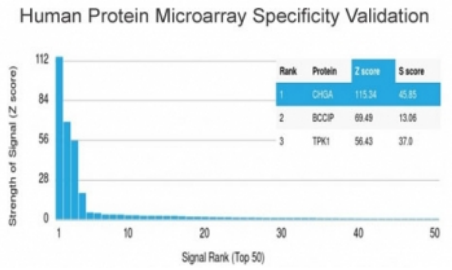
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CHGA/4219
Purity	Protein A/G affinity
UniProt	P10645
Localization	Finely granular cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Chromogranin A antibody is available for research use only.



Chromogranin A Antibody Protein Microarray Validated Pancreas IHC. Immunohistochemistry staining of formalin-fixed, paraffin-embedded human pancreatic tissue with Chromogranin A antibody (clone CHGA/4219) shows cytoplasmic granular staining within islets of Langerhans, consistent with CHGA expression in pancreatic neuroendocrine cells, while surrounding exocrine acinar structures are largely negative. Heat-induced epitope retrieval was performed by boiling sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes followed by cooling prior to testing.



SDS-PAGE analysis of purified, BSA-free Chromogranin A antibody (clone CHGA/4219) as confirmation of integrity and purity.



Chromogranin A Antibody Protein Microarray Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins demonstrates preferential binding of the Chromogranin A antibody clone CHGA/4219 to CHGA, with a markedly elevated Z-score relative to all other proteins on the array. The high S-score indicates strong specificity for Chromogranin A compared with off-target proteins. Z-score represents the signal intensity in standard deviations above the array mean, while S-score reflects the difference in Z-scores between the top-ranked target and the next highest signal, providing a quantitative measure of antibody specificity. These results support the protein microarray validated specificity of clone CHGA/4219.

Description

Chromogranin A antibody recognizes Chromogranin A, a secretory granule glycoprotein encoded by the CHGA gene and a hallmark marker of neuroendocrine differentiation. Chromogranin A Antibody Protein Microarray Validated is a mouse monoclonal antibody confirmed for target specificity using a high-density human protein microarray platform. Chromogranin A localizes to the cytoplasm within dense-core secretory granules of endocrine and neuroendocrine cells, where it plays a central role in hormone packaging and regulated secretion.

Chromogranin A antibody, also referred to as CHGA antibody, CgA antibody, and CGA antibody in the literature, targets a member of the granin family of acidic secretory proteins. Synthesized as a precursor protein, Chromogranin A undergoes proteolytic cleavage to generate biologically active peptides including vasostatin, pancreastatin, and catestatin. These peptides are involved in modulation of cardiovascular tone, glucose metabolism, and neuroendocrine signaling. Within the trans-Golgi network, Chromogranin A promotes aggregation of peptide hormones and contributes to biogenesis and structural stability of secretory granules.

CHGA expression is characteristic of adrenal medulla chromaffin cells, pancreatic islet cells, gastrointestinal enteroendocrine cells, parathyroid tissue, and other dispersed neuroendocrine cell populations. The expected immunohistochemical pattern is cytoplasmic granular staining corresponding to secretory vesicle localization. Because of this lineage-restricted distribution, Chromogranin A is widely used in research as a reliable marker of neuroendocrine differentiation.

Protein microarray validation involves screening the antibody against thousands of individual full-length human proteins to confirm preferential binding to Chromogranin A with minimal cross-reactivity. High Z-score and S-score values support strong and specific interaction with the intended target relative to off-target proteins. This orthogonal specificity assessment provides an additional layer of confidence in antibody performance for research applications.

Chromogranin A Antibody Protein Microarray Validated is suitable for studies investigating neuroendocrine tissue biology, tumor differentiation, and secretory pathway regulation at NSJ Bioreagents.

This CHGA antibody is part of a broader Chromogranin A antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the Chromogranin A antibody protein microarray validated should be determined by the researcher.

Immunogen

A portion of amino acids 23-165 was used as the immunogen for the Chromogranin A antibody.

Storage

Aliquot the Chromogranin A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
Copyright © NSJ Bioreagents. All rights reserved.