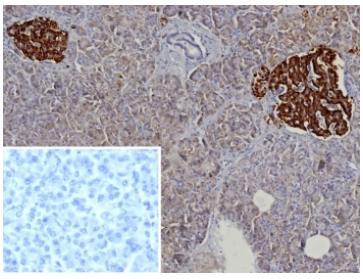
Recombinant CgA Antibody / Chromogranin A [clone rCHGA/9612] (V5459)

Catalog No.	Formulation	Size
V5459-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5459-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5459SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

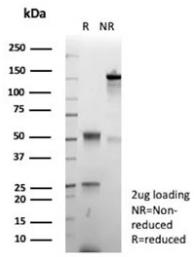
Recombinant MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2b, kappa
Clone Name	rCHGA/9612
Purity	Protein A/G affinity
UniProt	P10645
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant CgA antibody is available for research use only.



Immunohistochemistry of Recombinant CgA Antibody in human pancreas. Formalin-fixed, paraffin-embedded human pancreas tissue stained with recombinant CgA antibody (clone rCHGA/9612) shows strong cytoplasmic granular staining in islets of Langerhans, consistent with Chromogranin A expression in pancreatic neuroendocrine cells, while surrounding exocrine acinar tissue is 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. The inset image shows a PBS negative control in which primary antibody was omitted, demonstrating absence of non-specific staining.



SDS-PAGE analysis of purified, BSA-free recombinant CgA antibody (clone rCHGA/9612) as confirmation of integrity and purity.

Description

Recombinant CgA Antibody recognizes Chromogranin A, a secretory granule protein encoded by the CHGA gene and widely used as a marker of neuroendocrine differentiation. Chromogranin A is an acidic glycoprotein localized to the cytoplasm of endocrine and neuroendocrine cells, where it is stored within dense-core secretory granules. A Recombinant CgA Antibody is suitable for research applications focused on detecting Chromogranin A expression in formalin-fixed, paraffin-embedded tissues and other experimental systems evaluating neuroendocrine biology.

CgA antibody, also referred to as Chromogranin A antibody and CHGA antibody in the literature, targets a member of the granin protein family. Chromogranin A functions in granule biogenesis, hormone packaging, and regulated secretion within the trans-Golgi network and secretory vesicles. Proteolytic processing of Chromogranin A generates several biologically active peptides, including vasostatin, pancreastatin, and catestatin, which contribute to modulation of cardiovascular tone, metabolic regulation, and neuroendocrine signaling pathways.

CHGA is highly expressed in adrenal medulla chromaffin cells, pancreatic islet cells, gastrointestinal enteroendocrine cells, parathyroid tissue, and dispersed neuroendocrine cells throughout multiple organ systems. The expected immunohistochemical pattern is cytoplasmic granular staining corresponding to secretory vesicle localization. Because of this restricted lineage expression profile, Chromogranin A serves as a robust research marker for identifying neuroendocrine cells and tumors.

In tumor research, Chromogranin A expression is commonly evaluated in neuroendocrine neoplasms such as carcinoid tumors, pancreatic neuroendocrine tumors, small cell carcinoma, medullary thyroid carcinoma, and pheochromocytoma. Strong cytoplasmic staining supports neuroendocrine differentiation, whereas most non-neuroendocrine carcinomas demonstrate limited or absent expression. A Recombinant CgA Antibody therefore plays an important role in studies investigating tumor classification, differentiation status, and neuroendocrine pathway activity.

The rCHGA/9612 antibody is generated by expression in mammalian cells to provide consistent performance and lot-to-lot reproducibility for research use 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 recombinant CgA antibody should be determined by the researcher.

Immunogen

Recombinant full-length human Chromogranin A protein was used as the immunogen for the recombinant CgA antibody.

Storage

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