CHGA Antibody for IHC / Chromogranin A for Immunohistochemistry [clone MSVA-380R] (V6063)

Catalog No.	Formulation	Size
V6063-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6063-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-380R
UniProt	P10645
Localization	Cytoplasmic vesicle, Neuronal dense core vesicle, Secreted, Secretory vesicle
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This CHGA/Chromogranin A antibody is available for research use only.



CHGA Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Chromogranin A CHGA in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal CHGA antibody clone MSVA-380R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong cytoplasmic granular localization in neuroendocrine cell populations, including adrenal medulla, pancreatic islets, and scattered enteroendocrine cells of the gastrointestinal tract, while most non-neuroendocrine tissues remain largely negative. Within tumor tissue microarrays, robust cytoplasmic positivity is observed in neuroendocrine neoplasms such as pheochromocytoma, small cell carcinoma, medullary thyroid carcinoma, and pancreatic neuroendocrine tumors, whereas non-neuroendocrine malignancies show minimal staining. Evaluation across large TMA panels enables direct comparison of CHGA expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CHGA expression profiles in the Human Protein Atlas, supporting its use as a neuroendocrine marker.

Description

CHGA antibody recognizes Chromogranin A, a secretory glycoprotein encoded by the CHGA gene and widely expressed in neuroendocrine cells. CHGA Antibody for IHC (clone MSVA-380R) is a recombinant rabbit monoclonal antibody developed for immunohistochemical detection of this hallmark neuroendocrine marker in formalin-fixed, paraffin-embedded tissues. Chromogranin A localizes predominantly to the cytoplasm within dense-core secretory granules of endocrine and neuroendocrine cells, where it participates in hormone storage, granule biogenesis, and regulated secretion. This CHGA antibody is part of a broader Chromogranin A antibody panel offered by NSJ Bioreagents.

CHGA antibody, also referred to as Chromogranin A antibody and CgA antibody in the literature, targets a member of the granin family of acidic secretory proteins. Chromogranin A is synthesized as a precursor protein that undergoes proteolytic processing to generate several bioactive peptides, including vasostatin, pancreastatin, and catestatin. These peptides contribute to regulation of hormone release, cardiovascular function, and metabolic signaling pathways. Within secretory granules, Chromogranin A plays an essential structural role by promoting aggregation of peptide hormones and stabilizing granule formation in the trans-Golgi network.

CHGA expression is characteristic of neuroendocrine tissues such as adrenal medulla, pancreatic islets, gastrointestinal enteroendocrine cells, parathyroid gland, and various dispersed neuroendocrine cell populations throughout the respiratory and genitourinary tracts. Cytoplasmic granular staining is the expected immunohistochemical pattern in these cell types. Because of this restricted lineage distribution, Chromogranin A is widely used in research studies as a robust marker of neuroendocrine differentiation.

In tumor biology, CHGA expression is frequently evaluated in neuroendocrine neoplasms including carcinoid tumors, pancreatic neuroendocrine tumors, small cell carcinoma, medullary thyroid carcinoma, and pheochromocytoma. Strong cytoplasmic granular staining supports neuroendocrine lineage, while most non-neuroendocrine carcinomas lack expression. CHGA antibody for IHC is therefore commonly incorporated into research panels investigating neuroendocrine differentiation and tumor classification.

The recombinant rabbit monoclonal clone MSVA-380R provides consistent detection of Chromogranin A expression patterns in normal and neoplastic neuroendocrine tissues for research use at NSJ Bioreagents.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the CHGA antibody for IHC should be determined by the researcher.

2. This CHGA/Chromogranin A antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

Recombinant full-length human chromogranin A protein was used as the immunogen for the CHGA antibody for IHC.

Storage

CHGA/Chromogranin A antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

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