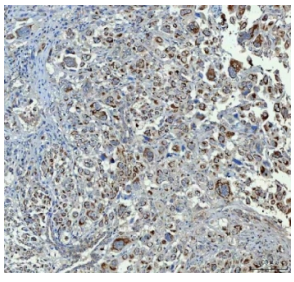
CHGA Antibody for FACS / Flow Cytometry Antibody (RQ7726)

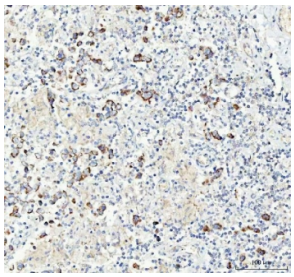
Catalog No.	Formulation	Size
RQ7726	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

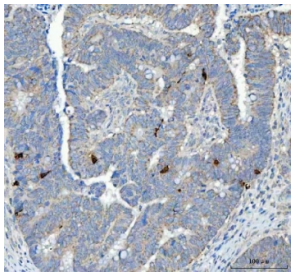
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P10645
Localization	Finely granular cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This CHGA Antibody for FACS / Flow Cytometry Antibody is available for research use only.



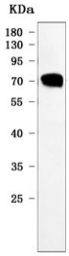
CHGA Antibody Lung Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human lung adenocarcinoma tissue with CHGA antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



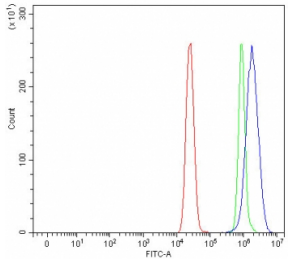
CHGA Antibody Testicular Germ Cell Tumor IHC. Immunohistochemistry staining of FFPE human testicular germ cell tumor tissue with CHGA antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



CHGA Antibody Colorectal Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human colorectal adenocarcinoma tissue with CHGA antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



CHGA Antibody WB. Western blot testing of human SH-SY5Y cell lysate with CHGA antibody. Predicted molecular weight ~50 kDa but may be observed at higher molecular weights due to glycosylation.



CHGA Antibody for FACS Human MCF7 Cells. Flow cytometry analysis of Chromogranin A / CHGA expression in human MCF7 cells using CHGA Antibody for FACS at 1 ug per million cells (blue) compared to isotype control (green) and unstained cells (red). The CHGA Antibody for FACS demonstrates a clear right-shifted population relative to controls, supporting detection of CHGA-positive cells. This flow cytometry antibody enables reliable identification of CHGA expression in cell-based assays.

Description

Chromogranin A (CHGA) is a secretory glycoprotein localized to dense core granules of neuroendocrine cells, where it plays a central role in hormone storage, processing, and regulated secretion. CHGA Antibody for FACS / Flow Cytometry Antibody is designed to enable detection of CHGA in cell-based assays at the single-cell level, supporting analysis of neuroendocrine differentiation and secretory activity. Chromogranin A (CHGA) is widely used as a marker of neuroendocrine lineage and is expressed in endocrine tissues including adrenal medulla, pancreatic islets, and gastrointestinal enteroendocrine cells, where it exhibits characteristic granular cytoplasmic localization.

Chromogranin A antibody, also referred to as CHGA antibody or neuroendocrine marker antibody, recognizes a protein that undergoes extensive post-translational processing to generate multiple bioactive peptides involved in hormone regulation and intercellular signaling. CHGA is predominantly localized within intracellular secretory vesicles, and detection by flow cytometry typically requires fixation and permeabilization to access these compartments. This intracellular localization pattern makes CHGA particularly valuable for identifying neuroendocrine cells and secretory phenotypes in heterogeneous populations using flow cytometry-based approaches.

This CHGA Antibody for FACS / Flow Cytometry Antibody is supported by flow cytometry data demonstrating detection of CHGA in human MCF7 cells, where a distinct right-shifted population is observed relative to unstained and isotype control

samples. Flow cytometry enables quantitative measurement of CHGA-positive cells and allows assessment of expression heterogeneity across large populations, providing insights into cell state, differentiation, and functional activity. This capability is especially useful for identifying subpopulations with neuroendocrine-like characteristics or for monitoring changes in CHGA expression under experimental conditions.

In addition to flow cytometry, CHGA expression can be evaluated by complementary methods such as immunohistochemistry and western blot, where granular cytoplasmic staining and protein-level detection confirm expression patterns observed in single-cell assays. While tissue-based methods provide spatial localization and western blot supports protein characterization, flow cytometry uniquely enables rapid and quantitative analysis of intracellular CHGA expression across thousands of individual cells, making it a powerful tool for population-level studies.

CHGA plays an important role in neuroendocrine tumor biology, where it serves as a widely used marker for tumor identification and characterization. Expression levels are often elevated in neuroendocrine neoplasms, including carcinoid tumors and small cell carcinoma, and can reflect tumor differentiation status and secretory activity. Detection of CHGA at the single-cell level supports investigation of tumor heterogeneity and endocrine features in cultured models and clinical research settings.

Given its central role in secretory granule biology and neuroendocrine differentiation, CHGA represents an important target for flow cytometry-based analysis. A CHGA antibody for FACS can be used to evaluate intracellular CHGA expression, identify neuroendocrine cell populations, and support studies of hormone secretion, cellular differentiation, and tumor biology in systems where precise, single-cell resolution is required.

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

Application Notes

Optimal dilution of the CHGA Antibody for FACS / Flow Cytometry Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids L19-E417) was used as the immunogen for the CHGA antibody.

Storage

After reconstitution, the CHGA antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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