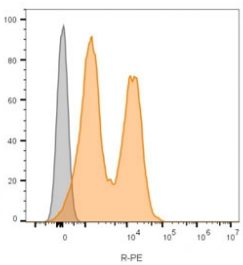
NCAM Antibody / CD56 [clone 123C3.D5] (V2209)

Catalog No.	Formulation	Size
V2209-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2209-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2209SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2209IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

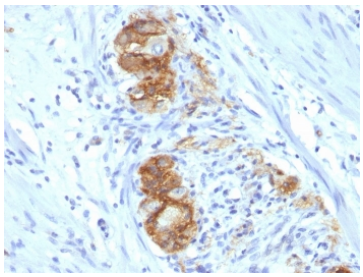
Citations (7)

Bulk quote request

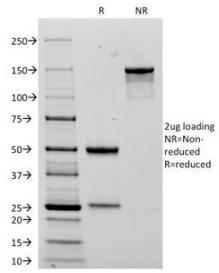
Species Reactivity	Human, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	123C3.D5
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	4684
Localization	Cell surface, cytoplasmic
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This **NCAM antibody** is available for research use only.



Flow cytometry testing of lymphocyte gated human PBM cells using NCAM antibody (clone 123C3.D5, orange) and unstained cells (gray).



IHC testing of FFPE human colon ganglion tissue stained with NCAM antibody (clone 123C3.D5).



SDS-PAGE Analysis of Purified, BSA-Free NCAM Antibody (clone 123C3.D5). Confirmation of Integrity and Purity of the Antibody.

Description

NCAM antibody clone 123C3.D5 is a monoclonal antibody specific for neural cell adhesion molecule, also known as NCAM or CD56. NCAM is a member of the immunoglobulin superfamily involved in cell adhesion, migration, and synaptic plasticity. It is expressed in neural tissue, muscle, natural killer cells, and subsets of other immune cells. Because of its role in development, regeneration, and cancer biology, NCAM is a widely studied adhesion molecule. NSJ Bioreagents supplies NCAM antibody clone 123C3.D5 for neuroscience, immunology, and oncology research.

In the nervous system, NCAM antibody clone 123C3.D5 has been applied to studies of neuronal adhesion, axon growth, and synaptic remodeling. NCAM is important for neural development, guiding axonal pathways and supporting long-term synaptic changes. Detection with clone 123C3.D5 highlights neural networks and provides insights into processes of neuroplasticity and regeneration.

In immunology, NCAM antibody clone 123C3.D5 identifies CD56 positive natural killer cells and subsets of T cells. This allows researchers to study cytotoxic immune responses, immune surveillance, and the role of NCAM in immune cell interactions. The antibody provides clear labeling of these populations, supporting investigations into both normal immune function and immune related disorders.

In pathology, NCAM antibody clone 123C3.D5 is frequently used as a diagnostic marker. NCAM expression is a defining feature of neuroendocrine tumors, including small cell lung carcinoma and neuroblastoma. Pathologists use clone 123C3.D5 to confirm neuroendocrine differentiation and to help classify tumor origin. NCAM expression has also been associated with tumor progression and metastasis, making its detection important in cancer biology.

This antibody has been validated across tissue based and cell based studies, producing strong membranous staining in positive cells. Its reproducibility and wide application have led to extensive citation in neuroscience, immunology, and cancer research. Alternate names include CD56 antibody, neural cell adhesion molecule antibody, and Leu-19 antibody.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM EDTA Buffer, pH 9, for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A membrane preparation of a small cell lung carcinoma was used as the immunogen for this CD56 / NCAM antibody.

Storage

Store the NCAM antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD56, Leu-19, NKH1, MSK39, NCAM120, NCAM140, NCAM180, Neural Cell Adhesion Molecule, NCAM antibody

References (2)