CD56 Antibody for IHC / NCAM1 Immunohistochemistry Antibody [clone MSVA-056R] (V6100)

Catalog No.	Formulation	Size
V6100-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6100-20UG	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-056R
UniProt	P13591, P13592
Localization	Cell membrane, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This CD56 Antibody for IHC / NCAM1 Immunohistochemistry Antibody is available for research use only.

CD56 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Neural cell adhesion molecule 1 / NCAM1 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates membranous and cytoplasmic localization in CD56-positive cell populations, including neural structures and subsets of immune and neuroendocrine cells, while many epithelial tissues remain largely negative. Within tumor tissue microarrays, staining highlights neuroendocrine differentiation and neural-associated tumor cell populations. Evaluation across large TMA panels enables direct comparison of NCAM1 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CD56 expression profiles in the Human Protein Atlas and support its use as a marker of neural and neuroendocrine lineage cells.

Description

Neural cell adhesion molecule 1 (NCAM1) is a cell surface glycoprotein encoded by the NCAM1 gene and is widely

recognized as the cluster of differentiation antigen CD56. CD56 Antibody for IHC / NCAM1 IHC Antibody (clone MSVA-056R) targets this well-characterized membrane protein and is designed for immunohistochemistry analysis of NCAM1 expression in tissue samples. NCAM1 belongs to the immunoglobulin superfamily of cell adhesion molecules and functions in cell-cell interactions, neuronal development, and immune cell signaling.

NCAM1 antibody, also referred to as CD56 antibody or Neural cell adhesion molecule antibody in the literature, detects a transmembrane adhesion protein expressed on multiple cell types including neurons, neuroendocrine cells, skeletal muscle, and subsets of immune cells. CD56 is particularly well known as a marker of natural killer cells and certain activated T cell populations. Because of its consistent surface expression in these cell types, CD56 antibody staining is frequently used in studies examining immune cell populations and neuroendocrine differentiation.

In tissue sections, NCAM1 is typically localized to the cell membrane where it mediates homophilic and heterophilic interactions that regulate cell adhesion and migration. The protein contributes to neuronal growth and synaptic plasticity within the nervous system, while also participating in immune cell communication and migration. Expression of NCAM1 has also been documented in a variety of epithelial and neuroendocrine tissues, reflecting its broader roles in tissue organization and cellular signaling.

CD56 expression is widely studied in oncology because many tumor types exhibit characteristic patterns of NCAM1 expression. Neuroendocrine tumors, small cell carcinomas, and certain hematologic malignancies frequently demonstrate strong CD56 staining patterns, making NCAM1 antibody detection valuable for research examining tumor biology and cellular differentiation. In addition, CD56 antibody staining is often used in studies investigating immune infiltration and natural killer cell distribution within tissues.

CD56 Antibody for IHC / NCAM1 IHC Antibody (clone MSVA-056R) enables detection of Neural cell adhesion molecule / NCAM1 expression in formalin-fixed paraffin-embedded tissues. Analysis of CD56 staining patterns can help researchers investigate cellular adhesion mechanisms, neuroendocrine differentiation, and immune cell populations within complex tissue environments.

For additional information on NCAM1/CD56 and its roles in neural cell adhesion, neuronal development, and cell signaling, see our NCAM1 Antibody / Neural Cell Adhesion Molecule 1 Antibody page.

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 CD56 Antibody for IHC / NCAM1 Immunohistochemistry Antibody should be determined by the researcher.

2. This NCAM1/CD56 antibody is recombinantly produced by expression in CHO 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

A recombinant fragment (around amino acids 200-400) of human NCAM1 (CD56) protein (exact sequence is proprietary) was used as the immunogen for the CD56 Antibody for IHC antibody.

Storage

NCAM1/CD56 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

NCAM1 antibody, Neural cell adhesion molecule antibody, CD56 neural cell adhesion molecule antibody, NK cell marker CD56 antibody, CD56 NCAM1 antibody

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