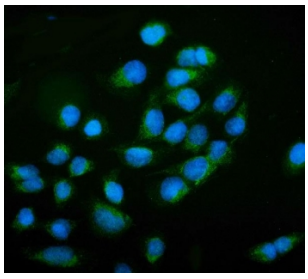
NCAM1 Antibody for IF / CD56 Immunofluorescence Antibody (RQ6330)

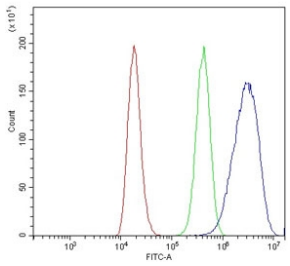
Catalog No.	Formulation	Size
RQ6330	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

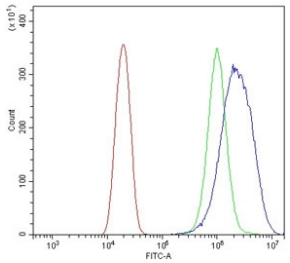
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P13591
Localization	Cell surface, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence (FFPE) : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This NCAM1 antibody is available for research use only.



NCAM1 Antibody for IF. Immunofluorescence analysis of FFPE human U-2 OS cells shows green fluorescence corresponding to Neural cell adhesion molecule 1 (NCAM1), also known as CD56. Signal is detected predominantly along the cell periphery with punctate cytoplasmic staining consistent with localization of this membrane-associated adhesion molecule. DAPI counterstain (blue) marks cell nuclei for reference. The staining pattern highlights NCAM1-positive cells within the population and illustrates the ability of this antibody to visualize CD56 expression by immunofluorescence microscopy. Heat-induced epitope retrieval was performed by steaming sections in pH6 citrate buffer for 20 minutes prior to antibody incubation.



Flow cytometry testing of human 293T cells with NCAM1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= NCAM1 antibody.



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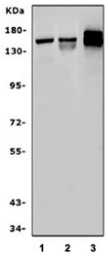

Western blot testing of 1) rat brain, 2) mouse brain and 3) mouse Neuro-2a lysate with NCAM1 antibody. Predicted molecular weight: ~110 kDa (soluble fragment), ~120/125 kDa (GPI-anchored), 140/180 kDa (transmembrane isoforms).

Description

Neural cell adhesion molecule 1 (NCAM1), also known as CD56, is a membrane glycoprotein encoded by the NCAM1 gene and functions as a key mediator of cell-cell adhesion and signaling. NCAM1 Antibody for IF enables visualization of Neural cell adhesion molecule / CD56 in cells and tissues using immunofluorescence microscopy. Because NCAM1 is predominantly localized at the cell surface, immunofluorescence staining allows researchers to observe the spatial distribution of CD56 on individual cells and evaluate membrane-associated expression patterns within complex cellular environments.

NCAM1 antibody, also referred to as CD56 antibody or Neural cell adhesion molecule antibody in the literature, detects a member of the immunoglobulin superfamily that participates in cellular adhesion and communication. Immunofluorescence analysis using NCAM1 Antibody for IF provides a powerful approach for visualizing CD56-positive cells and examining the organization of this adhesion molecule along the plasma membrane. Fluorescent labeling enables high-resolution imaging of NCAM1 localization and can reveal distinct membrane staining patterns or clustered distribution depending on the cell type and biological context.

NCAM1 is strongly expressed in neural tissues where it contributes to neuronal development, axonal growth, and synaptic plasticity. Immunofluorescence staining is widely used in neuroscience research to visualize NCAM distribution in neurons and neural networks. Fluorescent detection of CD56 allows researchers to observe cell surface localization and evaluate changes in NCAM expression associated with neuronal differentiation or synaptic remodeling.

In the immune system, CD56 is recognized as a defining marker of natural killer cells and certain activated T lymphocyte populations. Immunofluorescence detection of NCAM1 can therefore be used to visualize CD56-positive immune cells in mixed cell populations or tissue sections. The ability to combine NCAM1 staining with additional fluorescent markers enables multiparametric imaging approaches for studying immune cell interactions and cellular microenvironments.

NCAM1 Antibody for IF provides a useful tool for immunofluorescence-based visualization of Neural cell adhesion

molecule / NCAM1 expression. Fluorescent detection of CD56 supports studies investigating cell adhesion mechanisms, neural development, immune cell markers, and the spatial organization of NCAM1 on the cell surface.

Application Notes

Optimal dilution of the NCAM1 antibody for IF should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids T80-T328) was used as the immunogen for the NCAM1 antibody.

Storage

After reconstitution, the NCAM1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

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