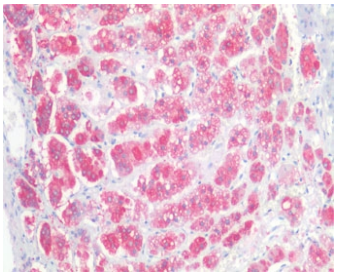
NCAM Antibody Goat Polyclonal / CD56 Antibody (isoform 2) (R34362)

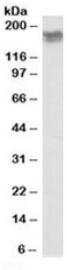
Catalog No.	Formulation	Size
R34362-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

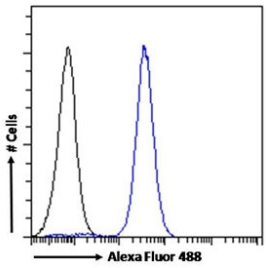
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Rat, Pig, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	4684
Localization	Cytoplasmic, membrane
Applications	Western Blot : 0.01-0.03ug/ml Immunohistochemistry (FFPE) : 5ug/ml Flow Cytometry : 10ug/million cells ELISA (peptide) LOD : 1:32000
Limitations	This NCAM antibody is available for research use only.



NCAM Antibody Goat Polyclonal. Immunohistochemistry analysis of FFPE human adrenal gland tissue demonstrates strong staining in neuroendocrine-associated cells consistent with expression of Neural cell adhesion molecule 1 (NCAM1), also known as CD56. Red chromogenic signal highlights NCAM1-positive cells within adrenal tissue, reflecting the expected distribution of this cell surface adhesion molecule in neuroendocrine cell populations. Steamed antigen retrieval was performed using pH6 citrate buffer prior to antibody incubation, and staining was visualized using an alkaline phosphatase (AP) detection system.



NCAM Antibody Goat Polyclonal. Western blot analysis of human frontal cortex lysate demonstrates a band at approximately 180 kDa corresponding to the glycosylated form of Neural cell adhesion molecule 1 (NCAM1), also known as CD56. The observed molecular weight is consistent with the heavily glycosylated NCAM isoforms commonly detected in neural tissues. Strong signal in brain lysate reflects the high expression of NCAM1 in neuronal cells where this adhesion molecule contributes to synaptic plasticity and neural cell-cell interactions.



FACS testing of fixed and permeabilized human U-251 cells with NCAM antibody (blue) at 10ug/10^6 cells and naive goat Ig (black).

Description

Neural cell adhesion molecule 1 (NCAM1), commonly referred to as CD56, is a membrane-associated glycoprotein encoded by the NCAM1 gene and functions as an important mediator of cell-cell adhesion and signaling. NCAM Antibody Goat Polyclonal recognizes Neural cell adhesion molecule / NCAM1 and enables detection of this widely studied adhesion protein in biological samples. NCAM1 belongs to the immunoglobulin superfamily of cell adhesion molecules and is primarily localized to the plasma membrane where it participates in cell communication and tissue organization.

NCAM antibody, also known as CD56 antibody or Neural cell adhesion molecule antibody in the literature, detects a glycoprotein expressed in several neural and immune cell populations. NCAM1 plays a key role in neuronal development and synaptic plasticity, contributing to axonal growth, cell migration, and neural network formation. Because of these functions, NCAM1 expression is widely studied in neuroscience research examining neuronal differentiation, connectivity, and neural tissue organization.

In addition to neural tissues, CD56 is expressed on several immune cell types, most prominently natural killer cells and subsets of activated T lymphocytes. NCAM1 therefore serves as a well-recognized immune marker that is frequently used to identify NK cell populations and evaluate immune cell phenotypes. The presence of CD56 on the cell surface allows antibodies against NCAM1 to detect and characterize these immune cell populations in research investigating immune regulation and cellular interactions.

NCAM1 expression has also been reported in various epithelial and neuroendocrine cell types where it contributes to cellular adhesion and signaling pathways. Because NCAM1 mediates both homophilic and heterophilic interactions between cells, the protein plays a role in regulating cell migration, tissue architecture, and intercellular communication. Analysis of NCAM1 expression can therefore provide insight into processes such as tissue development, immune cell behavior, and cell adhesion dynamics.

NCAM Antibody Goat Polyclonal provides a reagent for detecting Neural cell adhesion molecule / NCAM1 expression in research applications. Detection of CD56 supports studies investigating neural development, immune cell markers, and cellular adhesion mechanisms associated with NCAM1 function.

Application Notes

Optimal dilution of the NCAM antibody Goat Polyclonal should be determined by the researcher.

1. This NCAM antibody is specific to isoform 2.

Immunogen

Amino acids KASWTRPEKQETLD were used as the immunogen for this NCAM antibody.

Storage

Aliquot and store the NCAM antibody at -20oC.

Alternate Names

NCAM1 antibody, CD56 antibody, Neural cell adhesion molecule antibody, Neural cell adhesion molecule 1 antibody, CD56 neural cell adhesion molecule antibody