

For Research Use Only

# NCAM1/CD56 Recombinant antibody

Catalog Number: 82715-3-RR



## Basic Information

|   |  |   |
|---|--|---|
| <b>Catalog Number:</b><br>82715-3-RR                          | <b>GenBank Accession Number:</b><br>BC047244         | <b>Purification Method:</b><br>Protein A purification                   |
| <b>Size:</b><br>100ul , Concentration: 700 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>4684                        | <b>CloneNo.:</b><br>5N5   |
| <b>Source:</b><br>Rabbit                                      | <b>ENSEMBL Gene ID:</b><br>ENSG00000149294           | <b>Recommended Dilutions:</b><br>IHC 1:1000-1:4000<br>IF-P 1:250-1:1000 |
| <b>Isotype:</b><br>IgG  | <b>UNIPROT ID:</b><br>P13591                         |   |
| <b>Immunogen Catalog Number:</b><br>AG5528                    | <b>Full Name:</b><br>neural cell adhesion molecule 1 |   |
|   | <b>Calculated MW:</b><br>95 kDa                      |   |

## Applications

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|--|--|
| <b>Tested Applications:</b><br>IHC, IF-P, ELISA  | <b>Positive Controls:</b>  |
| <b>Species Specificity:</b><br>human   | <b>IHC :</b> human tonsillitis tissue, human colon cancer tissue |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> | <b>IF-P :</b> human tonsillitis tissue,                          |

## Background Information

Neural cell adhesion molecule 1 (NCAM1, also known as CD56) is a cell adhesion glycoprotein of the immunoglobulin (Ig) superfamily. It is a multifunction protein involved in synaptic plasticity, neurodevelopment, and neurogenesis. NCAM1 is expressed on human neurons, glial cells, skeletal muscle cells, NK cells and a subset of T cells, and the expression is observed in a wide variety of human tumors, including myeloma, myeloid leukemia, neuroendocrine tumors, Wilms' tumor, neuroblastoma, and NK/T cell lymphomas. Three major isoforms of NCAM1, with molecular masses of 120, 140, and 180 kDa, are generated by alternative splicing of mRNA (PMID: 9696812). The glycosylphosphatidylinositol (GPI)-anchored NCAM120 and the transmembrane NCAM140 and NCAM180 consist of five Ig-like domains and two fibronectin-type III repeats (FNIII). All three forms can be posttranslationally modified by addition of polysialic acid (PSA) (PMID: 14976519). Several other isoforms have also been described (PMID: 1856291).

## Storage

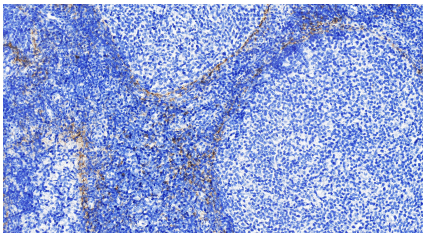
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

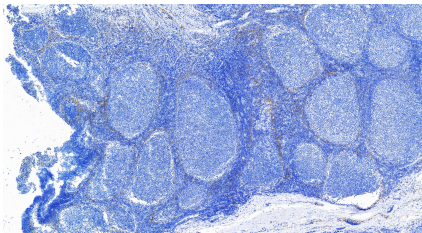
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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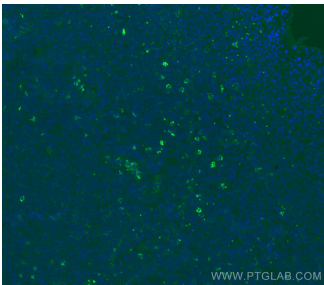
Selected Validation Data



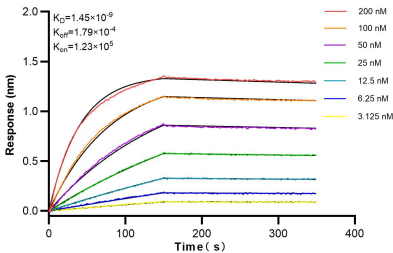
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 82715-3-RR (NCAM1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 82715-3-RR (NCAM1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue: using NCAM1/CD56 antibody (82715-3-RR, Clone: 5N5 ) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82715-3-RR against Human NCAM1/CD56 were performed. The affinity constant is 1.45 nM.