## For Research Use Only

## NCAM1/CD56 Recombinant antibody

Catalog Number:82715-3-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

82715-3-RR BC047244 Size: GeneID (NCBI): 700 μg/ml 4684

Source: ENSEMBL Gene ID:
Rabbit ENSG0000149294
Isotype: UNIPROT ID:
IgG P13591

Immunogen Catalog Number: Full Name:

AG5528 neural cell adhesion molecule 1

Calculated MW: 95 kDa

**Applications** 

Tested Applications: IHC, IF-P, ELISA Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls

IHC: human tonsillitis tissue, human colon cancer

**Purification Method:** 

Protein A purification

Recommended Dilutions:

IHC 1:1000-1:4000 IF-P 1:250-1:1000

CloneNo.:

tissue

IF-P: 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 fibronection-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:

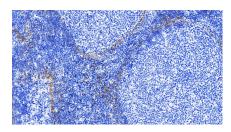
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

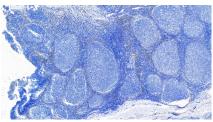
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

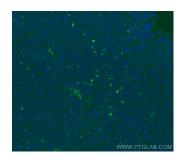
## **Selected Validation Data**



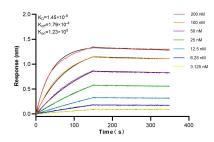
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 82715-3-RR (NCAM1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded 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 IgC(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.