

For Research Use Only

# NCAM1/CD56 Recombinant antibody

Catalog Number: 83883-5-RR



## Basic Information

<b>Catalog Number:</b> 83883-5-RR	<b>GenBank Accession Number:</b> GeneID (NCBI): 17967	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>UNIPROT ID:</b> P13595-1	<b>CloneNo.:</b> 240936B10
<b>Source:</b> Rabbit	<b>Full Name:</b> neural cell adhesion molecule 1	<b>Recommended Dilutions:</b> IHC 1:500-1:2000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 119 kDa	
<b>Immunogen Catalog Number:</b> EG0652	<b>Observed MW:</b> 120 kDa, 140 kDa, 180 kDa	

## Applications

<b>Tested Applications:</b> IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> mouse	<b>IHC :</b> mouse brain tissue, mouse cerebellum tissue, mouse colon 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/ICC :</b> Neuro-2a cells,

## 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 the addition of polysialic acid (PSA) (PMID: 14976519). Several other isoforms have also been described (PMID: 1856291).

## Storage

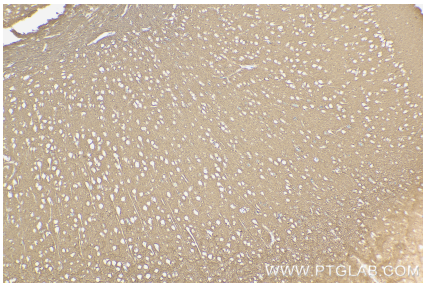
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

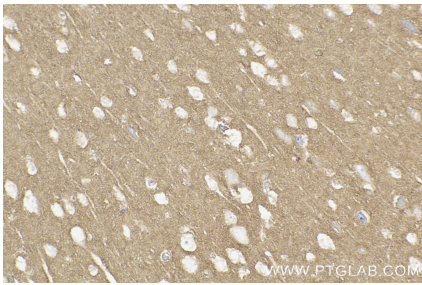
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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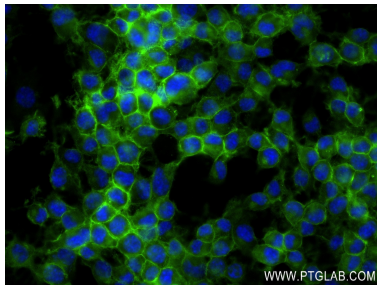
Selected Validation Data



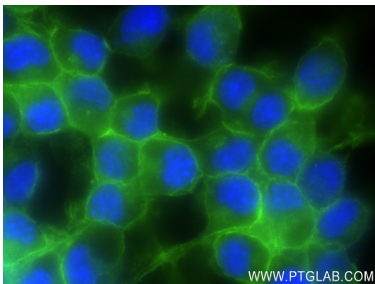
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83883-5-RR (NCAM1/CD56 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



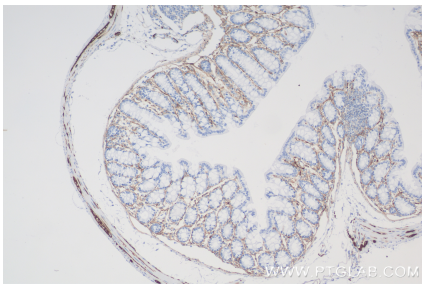
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83883-5-RR (NCAM1/CD56 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



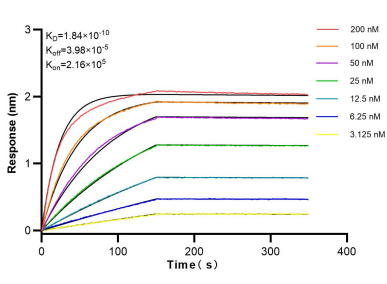
Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using Ncam1 antibody (83883-5-RR, Clone: 240936B10) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using Ncam1 antibody (83883-5-RR, Clone: 240936B10) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 83883-5-RR (NCAM1/CD56 antibody) at dilution of 1:9000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bilayer interferometry (BLI) kinetic assays of 83883-5-RR against Mouse Ncam1 were performed. The affinity constant is 0.184 nM.