

For Research Use Only

# NCAM1/CD56 Polyclonal antibody

Catalog Number: 14255-1-AP

Featured Product

67 Publications



## Basic Information

<b>Catalog Number:</b> 14255-1-AP	<b>GenBank Accession Number:</b> BC047244	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 850 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4684	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:8000-1:32000 IF/ICC 1:50-1:500
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000149294	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P13591	
<b>Immunogen Catalog Number:</b> AG5528	<b>Full Name:</b> neural cell adhesion molecule 1	
	<b>Calculated MW:</b> 95 kDa	
	<b>Observed MW:</b> 120 kDa, 140 kDa, 180 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Cited Applications:**  
WB, IHC, IF

**Species Specificity:**  
human, mouse, rat, pig

**Cited Species:**  
human, mouse, rat, pig

**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:**

**WB:** mouse brain tissue, Neuro-2a cells, rat brain tissue, pig brain tissue

**IHC:** human tonsillitis tissue, human appendicitis tissue, human colon tissue, human lung cancer tissue, Insulinoma tissue, mouse brain tissue, rat brain tissue

**IF/ICC:** SH-SY5Y 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 addition of polysialic acid (PSA) (PMID: 14976519). Several other isoforms have also been described (PMID: 1856291).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yanping Li	36213822	J Oncol	IF
Shaolong Li	30264546	Cancer Sci	IHC
Ashley Gillon	26385499	Biogerontology	IF

## 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

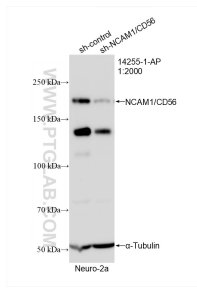
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

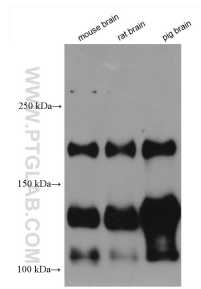
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

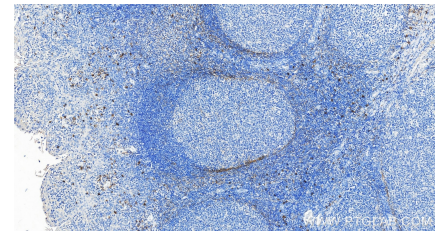
## Selected Validation Data



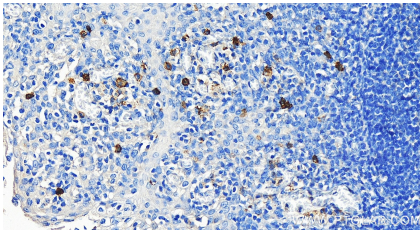
WB result of NCAM1/CD56 antibody (14255-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NCAM1/CD56 transfected Neuro-2a cells.



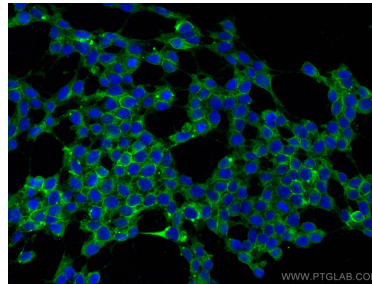
Various lysates were subjected to SDS PAGE followed by western blot with 14255-1-AP (NCAM1/CD56 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 14255-1-AP (NCAM1/CD56 antibody) at dilution of 1:16000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 14255-1-AP (NCAM1/CD56 antibody) at dilution of 1:16000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using NCAM1/CD56 antibody (14255-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).