

For Research Use Only

NCAM1/CD56 Recombinant monoclonal antibody



Catalog Number: 82715-1-RR

Featured Product

1 Publications

Basic Information

Catalog Number:

82715-1-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG5528

GenBank Accession Number:

BC047244

GeneID (NCBI):

4684

ENSEMBL Gene ID:

ENSG00000149294

UNIPROT ID:

P13591

Full Name:

neural cell adhesion molecule 1

Calculated MW:

95 kDa

Observed MW:

120 kDa, 140 kDa, 180 kDa

Purification Method:

Protein A purification

CloneNo.:

6N11

Recommended Dilutions:

WB: 1:2000-1:10000

IHC: 1:200-1:1000

IF-P: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

IHC

Species Specificity:

human, mouse, rat, pig

Cited Species:

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:

WB : pig brain tissue, SH-SY5Y cells, U-251 cells, Neuro-2a cells, C6 cells, mouse brain tissue, rat brain tissue

IHC : mouse brain tissue, human tonsillitis tissue, mouse colon tissue

IF-P : mouse brain 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).

Notable Publications

Author	Pubmed ID	Journal	Application
Yuanhua Lu	39722014	Mol Med	IHC

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

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

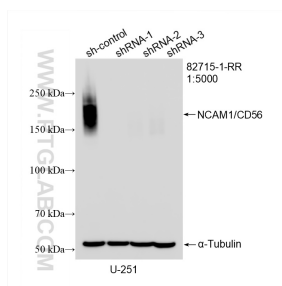
T: 4006900926

E: Proteintech-CN@ptglab.com

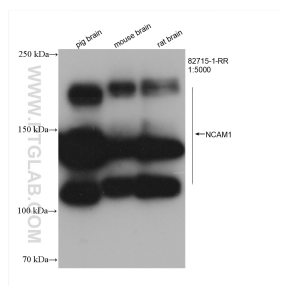
W: ptgcn.com

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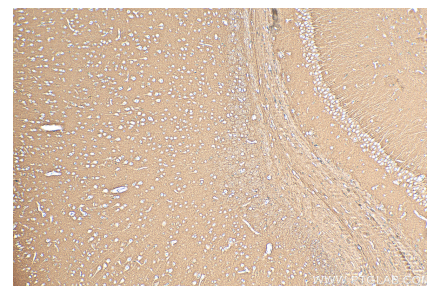
Selected Validation Data



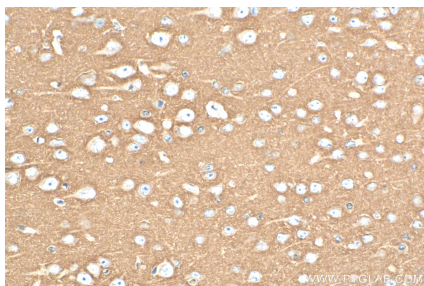
WB result of NCAM1/CD56 antibody (82715-1-RR; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NCAM1/CD56 transfected U-251 cells.



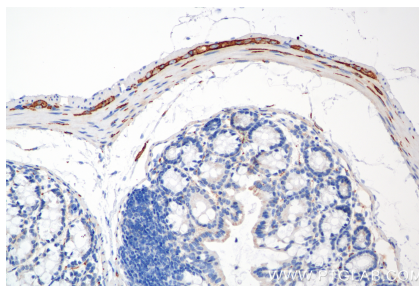
Various lysates were subjected to SDS PAGE followed by western blot with 82715-1-RR (NCAM1/CD56 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



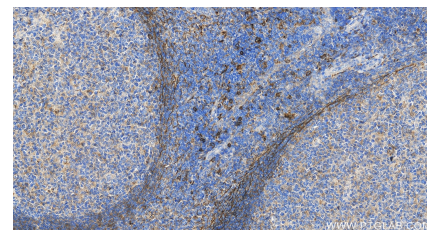
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82715-1-RR (NCAM1/CD56 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



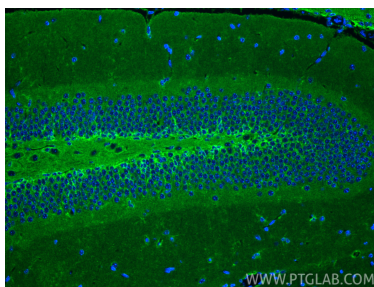
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82715-1-RR (NCAM1/CD56 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



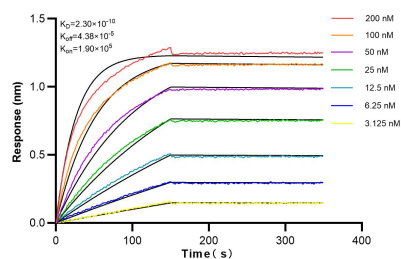
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 82715-1-RR (NCAM1/CD56 antibody) at dilution of 1:8000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 82715-1-RR (NCAM1/CD56 antibody) at dilution of 1:4000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using NCAM1/CD56 antibody (82715-1-RR, Clone: 6N11) at dilution of 1:200 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 82715-1-RR against Human NCAM1 were performed. The affinity constant is 0.23 nM.