## For Research Use Only

# NCAM1/CD56 Monoclonal antibody

Catalog Number:60238-1-lg 8 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

60238-1-lg BC047244 GeneID (NCBI):

150ul, Concentration: 1500 ug/ml by 4684

Nanodrop: ENSEMBL Gene ID: ENSG00000149294 Mouse UNIPROT ID: Isotype: P13591

lgG1 Full Name:

Immunogen Catalog Number: neural cell adhesion molecule 1 AG5732

Calculated MW: 95 kDa

Observed MW: 140 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications: WB, IHC, IF Species Specificity: human, rat, pig

**Cited Species:** human, mouse

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: fetal human brain tissue, C6 cells, human brain

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:1000-1:8000 IHC 1:2000-1:8000

IF-P 1:200-1:800

IF/ICC 1:200-1:800

CloneNo.:

1E8C9

tissue, pig brain tissue

IHC: human lung cancer tissue, human colon tissue IF-P: human colon tissue, human tonsillitis tissue IF/ICC: SH-SY5Y cells, human colon 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 isofroms have also been described (PMID: 1856291).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Liang Gong	34761524	Small	IHC
Yan Huang	35578896	Jpn J Clin Oncol	IHC
Xianzhi Liu	35849032	Hepatology	IF

Storage

Storage:

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

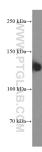
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for  $-20^{\circ}$ C storage

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

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

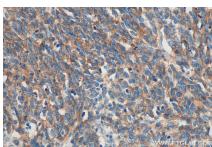
### Selected Validation Data



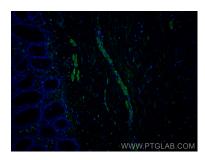
fetal human brain tissue were subjected to SDS PAGE followed by western blot with 60238-1-lg (NCAM1/CD56 antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



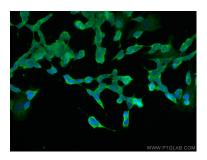
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 60238-1-Ig (NCAM1/CD56 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



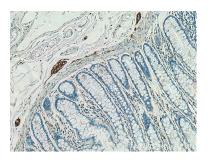
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 60238-1-Ig (NCAM1/CD56 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



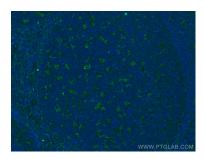
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human colon tissue using NCAM1/CD56 antibody (60238-1-1g, Clone: 1E8C9) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using NCAM1/CD56 antibody (60238-1-lg, Clone: 1E8C9) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 60238-1-1g (NCAM1/CD56 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 (60238-1-lg, Clone: 1E8C9) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).