

## Basic Information

<b>Catalog Number:</b> 60238-1-Ig	<b>GenBank Accession Number:</b> BC047244	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1500 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4684	<b>CloneNo.:</b> 1E8C9
<b>Source:</b> Mouse	<b>ENSEMBL Gene ID:</b> ENSG00000149294	<b>Recommended Dilutions:</b> WB 1:1000-1:8000 IHC 1:2000-1:8000 IF 1:200-1:800
<b>Isotype:</b> IgG1	<b>UNIPROT ID:</b> P13591	
<b>Immunogen Catalog Number:</b> AG5732	<b>Full Name:</b> neural cell adhesion molecule 1	
	<b>Calculated MW:</b> 95 kDa	
	<b>Observed MW:</b> 140 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Cited Applications:

IF, IHC, WB

### Species Specificity:

human, mouse, pig, rat

### 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 tissue, pig brain tissue

**IHC** : human lung cancer tissue, human colon tissue

**IF** : 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 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
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.

### Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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

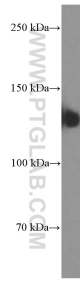
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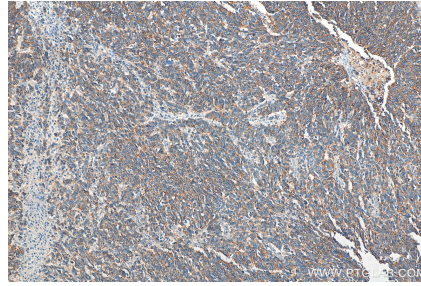
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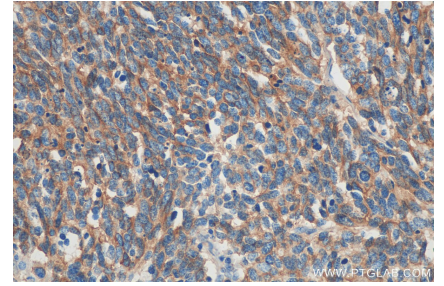
## Selected Validation Data



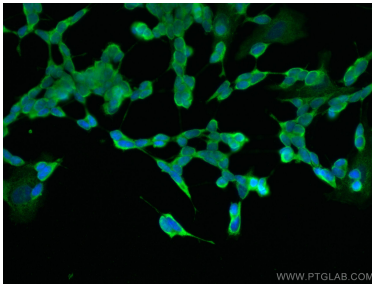
fetal human brain tissue were subjected to SDS PAGE followed by western blot with 60238-1-Ig (NCAM1/CD56 antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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