NCAM1/CD56 Polyclonal antibody

Catalog Number: 14255-1-AP

Basic Information

Catalog Number: 14255-1-AP
Size: 150μl, Concentration: 700 μg/ml by Nanodrop
Source: Rabbit
Isotype: IgG
Immunogen Catalog Number: AG5528

GenBank Accession Number: BCO47244
GeneID (NCBI): 4684
Full Name: neural cell adhesion molecule 1
Calculated MW: 95 kDa
Observed MW: 120 kDa, 160 kDa, 180 kDa

Purification Method: Antigen affinity purification
Recommended Dilutions:
WB: 1:5000-1:50000
IHC: 1:2000-1:20000

Applications

Tested Applications: FC, IHC, WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat, pig
Cited Species: human, rat, mouse, 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, mouse cerebellum tissue, rat brain tissue, pig brain tissue
IHC: human lung cancer tissue, human tonsillitis tissue, human appendicitis tissue, Insulinoma tissue, mouse brain tissue, rat 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

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yanping Li</td>
<td>36213822</td>
<td>J Oncol</td>
<td>IF</td>
</tr>
<tr>
<td>Shaolong Li</td>
<td>30264566</td>
<td>Cancer Sci</td>
<td>IHC</td>
</tr>
<tr>
<td>Ashley Gillon</td>
<td>26385499</td>
<td>Biogerontology</td>
<td>IF</td>
</tr>
</tbody>
</table>

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

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.
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.

1X10^6 SH-SY5Y cells were stained with 0.2ug NCAM1/CD56 antibody (14255-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.

Immunohistochemical analysis of paraffin-embedded human small cell lung carcinoma tissue slide using 14255-1-AP (NCAM1/CD56 antibody) at dilution of 1:16000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).