

## Product datasheet for **TA378947S**

### CD56 (NCAM1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ICC/IF, IHC, IP, WB
Recommended Dilution:	WB, 1:500 - 1:1000 IHC-P, 1:50 - 1:200 IF/ICC, 1:50 - 1:200 ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Formulation:	Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	95kDa
Gene Name:	neural cell adhesion molecule 1
Database Link:	<a href="#">Entrez Gene 4684 Human P13591</a>

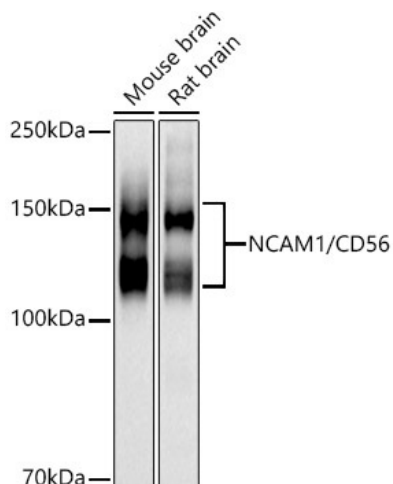
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**Background:**

This gene encodes a cell adhesion protein which is a member of the immunoglobulin superfamily. The encoded protein is involved in cell-to-cell interactions as well as cell-matrix interactions during development and differentiation. The encoded protein plays a role in the development of the nervous system by regulating neurogenesis, neurite outgrowth, and cell migration. This protein is also involved in the expansion of T lymphocytes, B lymphocytes and natural killer (NK) cells which play an important role in immune surveillance. This protein plays a role in signal transduction by interacting with fibroblast growth factor receptors, N-cadherin and other components of the extracellular matrix and by triggering signalling cascades involving FYN-focal adhesion kinase (FAK), mitogen-activated protein kinase (MAPK), and phosphatidylinositol 3-kinase (PI3K). One prominent isoform of this gene, cell surface molecule CD56, plays a role in several myeloproliferative disorders such as acute myeloid leukemia and differential expression of this gene is associated with differential disease progression. For example, increased expression of CD56 is correlated with lower survival in acute myeloid leukemia patients whereas increased severity of COVID-19 is correlated with decreased abundance of CD56-expressing NK cells in peripheral blood. Alternative splicing results in multiple transcript variants encoding distinct protein isoforms.

**Synonyms:**

CD56; MSK39; N-CAM-1; NCAM; NCAM-1

**Product images:**


Western blot analysis of various lysates using NCAM1 / CD56 Rabbit pAb ([TA378947]) at 1:500 dilution.

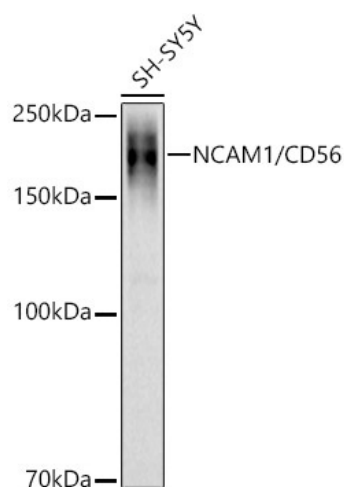
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates / proteins: 25 µg per lane.

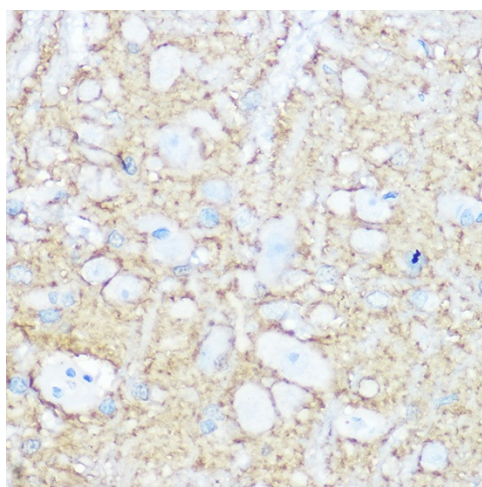
Blocking buffer: 3 % nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

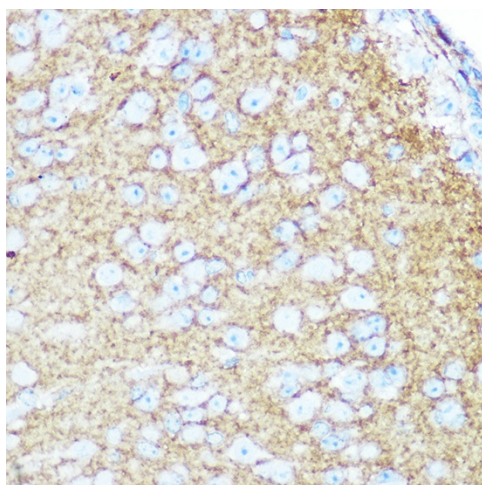
Exposure time: 90s.



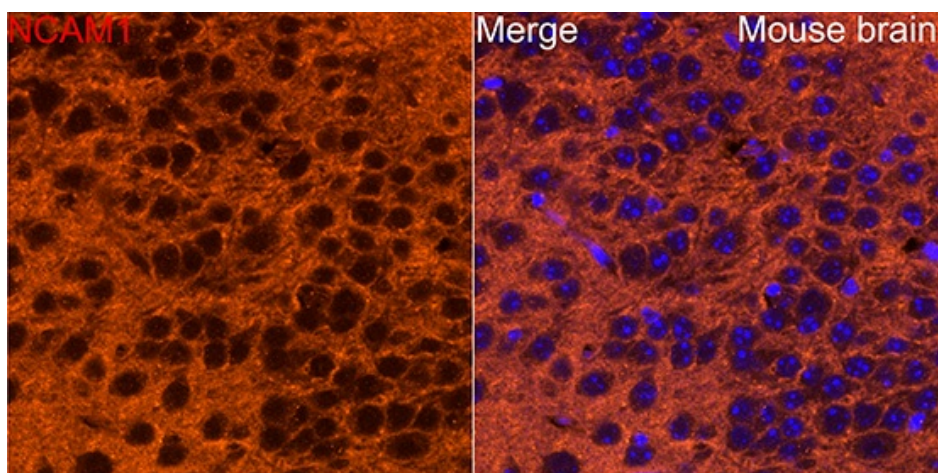
Western blot analysis of lysates from SH-SY5Y cells using NCAM1 / CD56 Rabbit pAb ([TA378947]) at 1:500 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Enhanced Kit (RM00021).  
Exposure time: 90s.



Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using NCAM1 / CD56 Rabbit pAb ([TA378947]) at a dilution of 1:100 (40x lens). Microwave antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using NCAM1 / CD56 Rabbit pAb ([TA378947]) at a dilution of 1:100 (40x lens). Microwave antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



Immunofluorescence analysis of rat brain cells using NCAM1 / CD56 Rabbit pAb ([TA378947]) at dilution of 1:20 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.