

## Product Information

### **MemDX™ Membrane Protein Human NCAM1 (Neural cell adhesion molecule 1) Expressed in *E.coli* with 6xHis tag at the N-terminus for Antibody Discovery, Partial (31-677aa)**

Cat. No.: **MPX4687K**

This product is for research use only and is not intended for diagnostic use.

This product is a 75.9 kDa Human NCAM1 membrane protein expressed in *E.coli*. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

#### Product Specifications

##### Host Species

Human

##### Target Protein

NCAM1

##### Protein Length

Partial (31-677aa)

##### Protein Class

Cell adhesion

##### Molecular Weight

75.9 kDa

##### TMD

1

##### Sequence

ISVGESKFFLCQVAGDAKDKDISWFSPNGEKLTPNQQRISVWVNDSSSTLTIYNANIDDAIGYKCVVTGEDGSESEATVNVKIFQKL

#### Product Description

##### Expression Systems

*E.coli*

##### Tag

6xHis tag at the N-terminus

##### Protein Format

Soluble

##### Form

Liquid or Lyophilized powder

**Purity**

>85% as determined by SDS-PAGE

**Buffer**

Tris-based buffer, 50% glycerol

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

NCAM1

**Full Name**

Neural cell adhesion molecule 1

**Introduction**

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.

**Alternative Names**

NCAM1; CD56; NCAM; MSK39; antigen recognized by monoclonal antibody 5.1H11; neural cell adhesion molecule, NCAM; Neural cell adhesion molecule 1

**Gene ID**

[4684](#)

**UniProt ID**

[P13591](#)