

# Product Information

## MemDX™ Membrane Protein Human NCAM1 (Neural cell adhesion molecule 1) Expressed in HEK293 for Antibody Discovery, Partial (20-708aa)

Cat. No.: **MPX0424K**

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

This product is a 103 kDa Human NCAM1 membrane protein expressed in HEK293. 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 (20-708aa)

#### Protein Class

Cell adhesion

#### Molecular Weight

103 kDa

#### TMD

1

#### Sequence

LQVDIVPSQGEISVGESKFFLCQVAGDAKDK  
DISWFSPNGEKLTPNQQRISVVWDDSSSTLTIYNANIDDAGIYKCVVTG  
EDGSESEATVNVKIFQKLMFKNAPTPQEFREGEDAVIVCDVSSLPPTII  
WKHKGRDVILKKDVRFIVLSNNYLQIRGIKKTDEGTYRCEGRILARGEIN  
FKDIQVIVNVPPTIQARQNIVNATANLGQSVTLVCDAEGFPEPTMSWTKD  
GEQIEQEEDDEKYIFSDDSSQLTIKKVDKNDEAEYICIAENKAGEQDATI  
HLKVFAPKITYVENQTAMELEEQVTLTCEASGDPIPSITWRTSTRNISS  
EEKASWTRPEKQETLDGHMVVRSHARVSSLTKSIQYTDAGEYICTASNT  
IGQDSQSMYLEVQYAPKLQGPVAVYTWEQNQVNITCEVFAYPSATISWFR  
DGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDGNYNCTAVNRIGQESL  
EFILVQADTPSSPSIDQVEPYSSAQVQFDEPEATGGVPILKYKAEWRAV  
GEEVWHSKWYDAKEASMEGIVTIVGLKPETTYAVRLAALNGKGLGEISAA  
SEFKTQPQGEPSAPKLEGQMGEDGNSIKVNLIKQDDGGSPIRHYLVRYR  
ALSSEWKPEIRLPSGSDHVMLKSLDWNAEYEVYVVAENQQGKSKAAHFVF  
RTSAQPTA

## Product Description

### Activity

Yes

### Expression Systems

HEK293

### Tag

hIgG1 Fc tag at the C-terminus

### Protein Format

Soluble

### Form

LYOPH

### Reconstitution

Reconstitute at 500 µg/mL in PBS.

### Endotoxin

<0.10 EU per 1 µg of the protein by the LAL method.

### Purity

>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

### Buffer

Lyophilized from a 0.2 µm filtered solution in PBS.

### 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](#)