

Product Information

MemDX™ Membrane Protein Human NCAM1 (Neural cell adhesion molecule 1) Full Length

Cat. No.: MPC2519K

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

This product is a made-to-order 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

Full length

Protein Class

Cell adhesion

TMD

1

Sequence

MLQTKDLIWTLFFLGTAVSLQVDIVPSQGEISVGESKFFLCQVAGDAKDK DISWFSPNGEKLTPNQQRISVVWNDDSSSTLTIYNANIDDAGIYKCVVTG EDGSESEATVNVKIFQKLMFKNAPTPQEFREGEDAVIVCDVVSSLPPTII WKHKGRDVILKKDVRFIVLSNNYLQIRGIKKTDEGTYRCEGRILARGEIN FKDIQVIVNVPPTIQARQNIVNATANLGQSVTLVCDAEGFPEPTMSWTKD GEQIEQEEDDEKYIFSDDSSQLTIKKVDKNDEAEYICIAENKAGEQDATI HLKVFAKPKITYVENQTAMELEEQVTLTCEASGDPIPSITWRTSTRNISS **EEKASWTRPEKQETLDGHMVVRSHARVSSLTLKSIQYTDAGEYICTASNT IGQDSQSMYLEVQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFR** DGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESL EFILVQADTPSSPSIDQVEPYSSTAQVQFDEPEATGGVPILKYKAEWRAV GEEVWHSKWYDAKEASMEGIVTIVGLKPETTYAVRLAALNGKGLGEISAA SEFKTQPVQGEPSAPKLEGQMGEDGNSIKVNLIKQDDGGSPIRHYLVRYR ALSSEWKPEIRLPSGSDHVMLKSLDWNAEYEVYVVAENQQGKSKAAHFVF RTSAQPTAIPANGSPTSGLSTGAIVGILIVIFVLLLVVVDITCYFLNKCG LFMCIAVNLCGKAGPGAKGKDMEEGKAAFSKDESKEPIVEVRTEEERTPN **HDGGKHTEPNETTPLTEPEKGPVEAKPECQETETKPAPAEVKTVPNDATQ TKENESKA**

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°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