

Recombinant Human NCAM1 Protein, His-tagged

Cat. No. NCAM1-02H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant human NCAM-1 (20-603aa), fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Species Human

Source Insect Cells

ProteinLength 20-603 a.a.

Description 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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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.

Form Liquid

Molecular Mass 65.7kDa(593aa)

AA Sequence

LQVDIVPSQGEISVGESKFFLCQVAGDAKDKDISWFSPNGEKLTPNQQRISVVWND
 DSSSTLIYNANIDDAIYKCVVTGEDGSESEATVNVKIFQKLMFKNAPTPQEFREG
 DAVIVCDVVSSLPPTIIWKHKGRDVILKKDVRFIVLSNNYLQIRGIKKTDEGTYRCEGRI
 LARGEINFKDIQVIVNVPPTIARQNIIVNATANLGQSVTLVCDAEGFPEPTMSWTKDG
 EQIEQEEDDEKYIFSDDSSQLTIKKVDKNDEAEYICIAENKAGEQDATIHLKVFAPKIT
 YVENQTAMELEEQVTLTCEASGDPIPSITWRTSTRNISSEKTLDGHMVVRSHARVS
 SLTLKSIQYTDAGEYICTASNTIGQDSQSMYLEVQYAPKLQGPVAVYTWEQGNQVNIT
 CEVFAYPSATISWFRDGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDGNYNCTAV
 NRIGQESLEFILVQADTPSSPSIDQVEPYSSTAQVQFDEPEATGGVPILKYKAEWRAV
 GEEVWHSKWYDAKEASMEGIVTIVGLKPETTYAVRLAALNGKGLGEISAASEFKTQP
 VHSPPP

Endotoxin < 1 EU/μg of protein (determined by LAL method)

Purity > 95% by SDS-PAGE

Applications SDS-PAGE

Storage Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Concentration 1 mg/mL (determined by Absorbance at 280nm)

Storage Buffer In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

GENE INFORMATION

Gene Name NCAM1 neural cell adhesion molecule 1 [Homo sapiens (human)]

Official Symbol NCAM1

Synonyms NCAM1; neural cell adhesion molecule 1; CD56; NCAM; MSK39; neural cell adhesion molecule 1; antigen recognized by monoclonal antibody 5.1H11; neural cell adhesion molecule, NCAM; EC 2.7.11.1

Gene ID 4684

mRNA Refseq NM_001076682

Protein Refseq NP_001070150

MIM 116930

UniProt ID P13591

SDS-PAGE 3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA