

Synonym

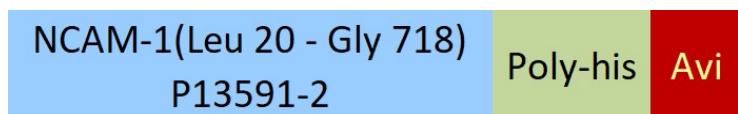
CD56,MSK39,NCAM1,N-CAM-1

Source

Biotinylated Human NCAM-1, His,Avitag (NC1-H82E3) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Gly 718 (Accession # [P13591-2](#)).

Predicted N-terminus: Leu 20

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 81.0 kDa. The protein migrates as 95-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 500 mM NaCl, pH8.0. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

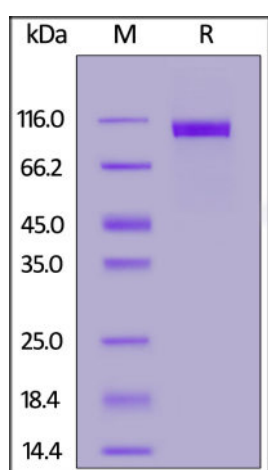
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

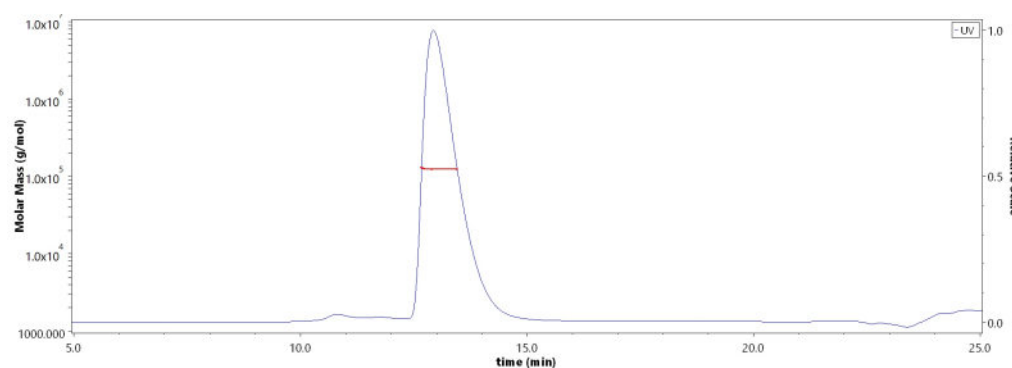
SDS-PAGE



Biotinylated Human NCAM-1, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

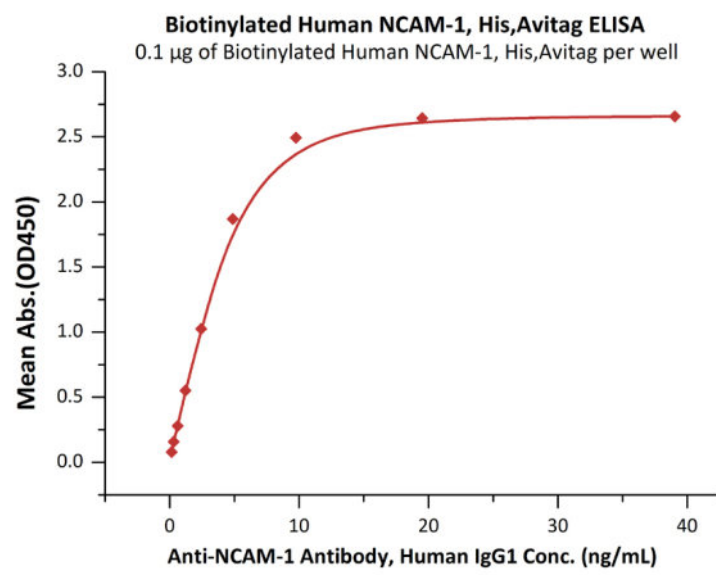
Bioactivity-ELISA

SEC-MALS



The purity of Biotinylated Human NCAM-1, His,Avitag (Cat. No. NC1-H82E3) is more than 90% and the molecular weight of this protein is around 115-125 kDa verified by SEC-MALS.

[Report](#)



Immobilized Biotinylated Human NCAM-1, His,Avitag (Cat. No. [NC1-H82E3](#)) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. [STN-N5116](#)) precoated (0.5 µg/well) plate can bind Anti-NCAM-1 Antibody, Human IgG1 with a linear range of 1-5 ng/mL (QC tested).

Background

NCAM1 belongs to the immunoglobulin superfamily of adhesion molecules. A wide range of alternatively spliced NCAM1 messenger RNAs (mRNAs) has been described to date, but only the 120-, 140-, and 180- kDa isoforms are commonly expressed. NCAM1 plays an important role in the regulation of neurogenesis, neurite outgrowth, proliferation, and cell migration, however, its function in hematopoiesis, including NK cells, is poorly understood. NCAM1 signaling is mediated either by homophilic or heterophilic interactions with fibroblast growth factor receptor (FGFR), L1-CAM, N-cadherin and other components of the extracellular matrix. Upon activation, NCAM1 triggers a variety of signaling cascades including FYN–focal adhesion kinase (FAK), MAPK, and phosphatidylinositol 3-kinase (PI3K) pathways.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.