

Synonym

CD56,MSK39,NCAM1,N-CAM-1

Source

FITC-Labeled Human NCAM-1, His Tag(NC1-HF2H5) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Gly 718 (Accession # [P13591-2](#)).

Predicted N-terminus: Leu 20

Molecular Characterization

NCAM-1(Leu 20 - Gly 718) P13591-2	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 79.3 kDa. The protein migrates as 90-116 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 1.5-3.5.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 500 mM NaCl, pH8.0 with trehalose as protectant.

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.

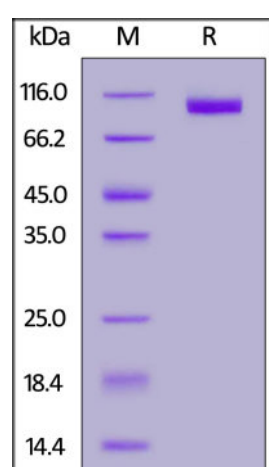
Storage

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

Please protect from light and 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

FITC-Labeled Human NCAM-1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Background

NCAM1 belongs to the immunoglobulin superfamily of adhesion molecules. A wide range of alternatively spliced NCAM1 messenger Rs (mRs) 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.