

Synonym

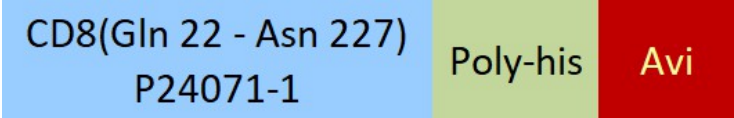
CD89,FCAR,IgA Fc receptor

Source

Biotinylated Human CD89 Protein, His,Avitag(CD9-H82Eb) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Asn 227 (Accession # [P24071-1](#)).

Predicted N-terminus: Gln 22

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 27.1 kDa. The protein migrates as 40-55 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

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

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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

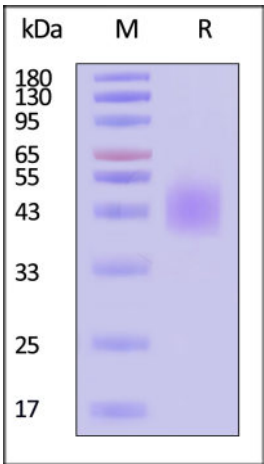
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please 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.

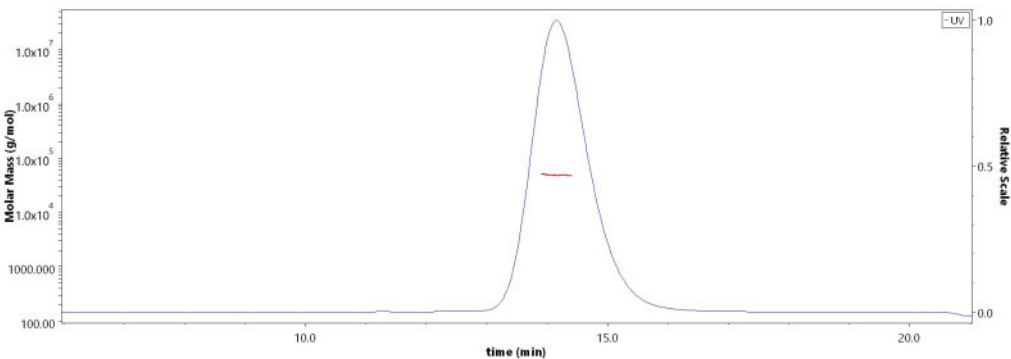
SDS-PAGE



Biotinylated Human CD89 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA

SEC-MALS

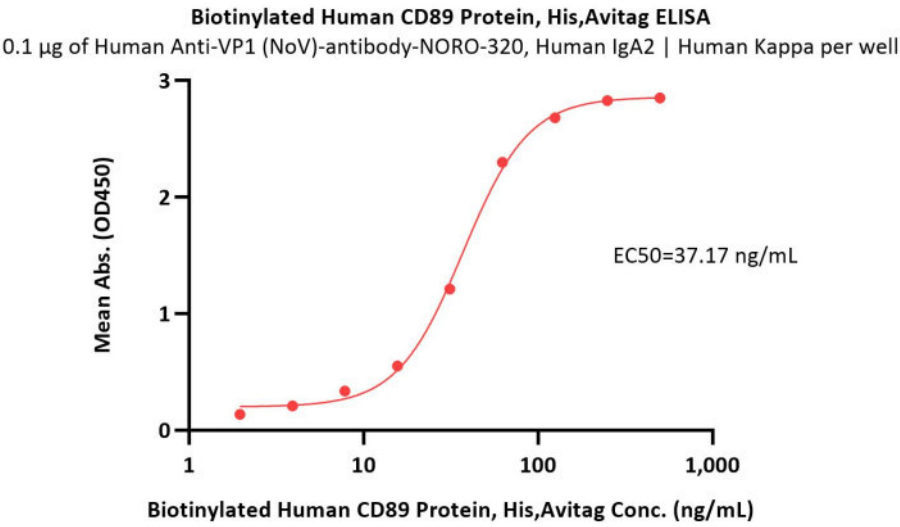


The purity of Biotinylated Human CD89 Protein, His,Avitag (Cat. No. CD9-H82Eb) is more than 95% and the molecular weight of this protein is around 40-55 kDa verified by SEC-MALS.

[Report](#)

Discounts, Gifts,
and more!





Immobilized Human Anti-VP1 (NoV)-antibody-NORO-320, Human IgA2 | Human Kappa at 1 µg/mL (100 µL/well) can bind Biotinylated Human CD89 Protein, His,Avitag (Cat. No. CD9-H82Eb) with a linear range of 2-63 ng/mL (QC tested).

Background

CD89 (FCAR) is a variably glycosylated 50-100 kDa myeloid-specific type I transmembrane (TM) Fc receptor for IgA that is a member of the multichain immune recognition receptor (MIRR) family. Human CD89 contains a 21 amino acid (aa) signal sequence and extracellular (ECD), TM and cytoplasmic domains of 206, 19 and 41 aa, respectively. Arg230 within the TM domain supports interaction with the ITAM-containing signaling subunit, FcR gamma, which contains a TM Asp . Two ECD C2-type Ig-like domains (EC1 and 2) are oriented at right angles. Up to two molecules of FCAR can bind one molecule of serum IgA via EC1. Many splice variants have been reported, but only two have been identified as proteins. The a.2 form, which lacks 22 aa just prior to the TM domain, is exclusively expressed in alveolar macrophages. The a.3 form lacks EC2. FCAR binds monomeric, polymeric and secretory IgA, but does not mediate the barrier function of secretory IgA in mucosal epithelium. CD89 (Fc alphaRI) is the human myeloid IgA Fc receptor expressed on cells, such as neutrophils, eosinophils and monocytes/macrophages. Cross-linking of CD89 on these cells, by IgA-opsonised particles (e.g. bacteria, viruses) or anti-CD89 monoclonal antibodies, can trigger various immunological effector functions which are generally protective but may also cause harm to the body.

