

Biotinylated Human CD55 / DAF Protein, His,Avitag™ (MALS verified)

Catalog # CD5-H82E4



Synonyms

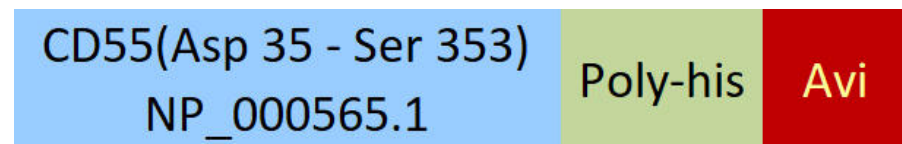
CD55, DAF, CR, CROM, TC

Source

Biotinylated Human CD55 Protein, His,Avitag (CD5-H82E4) is expressed from human 293 cells (HEK293). It contains AA Asp 35 - Ser 353 (Accession # [NP_000565.1](#)).

Predicted N-terminus: Asp 35

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 39.2 kDa. The protein migrates as 55-70 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

>90% 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

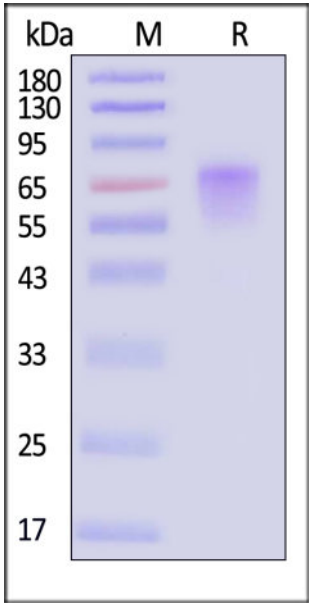
This product is stable after storage at:

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

ACRO Quality Management System

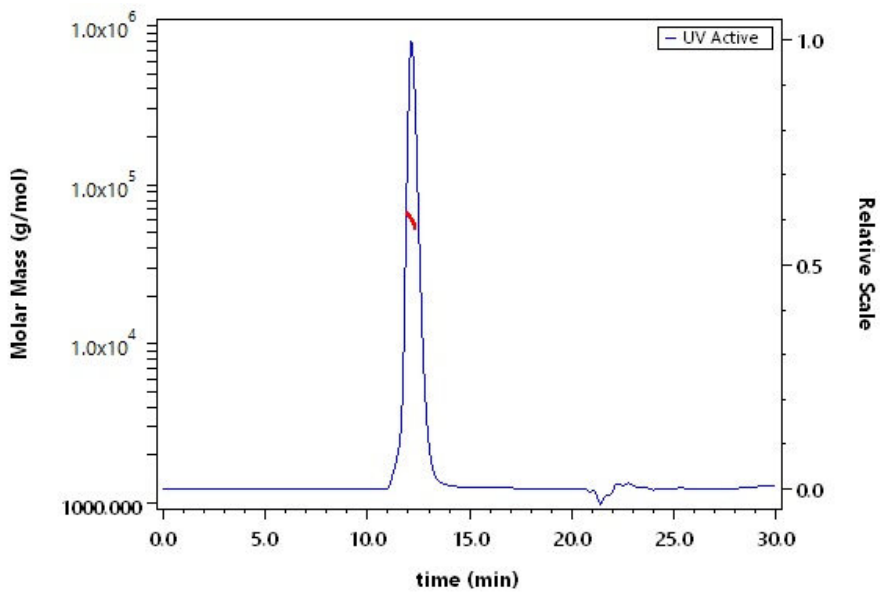
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



Biotinylated Human CD55 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 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Biotinylated Human CD55 Protein, His,Avitag (Cat. No. CD5-H82E4) is more than 95% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.

Background

CD55 is also known as DAF or decayaccelerating factor, is a member of the RCA (regulators of complement activation) family characterized by four to 30 SCRs (short consensus repeats) in their plasma-exposed regions. CD55 /DAF is a 70 kDa membrane protein that regulates the complement system on the cell surface. It prevents the assembly of the C3bBb complex (the C3-convertase of the alternative pathway) or accelerates the disassembly of preformed convertase, thus blocking the formation of the membrane attack complex. This glycoprotein is broadly distributed among hematopoietic and non-hematopoietic cells. It is a determinant for the Cromer blood group system. CD55 is known to bind CD97 via the first SCR. It also binds physiologicallygenerated C3 convertases with its second and third SCRs. Binding results in an accelerated “decay”, or dissociation of active C3 convertases, thus blocking the development of C’ attack complexes on nonforeign cells. Finally, viruses and bacteria are also known to utilize multiple SCR sites for infection.



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