

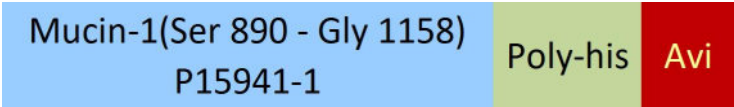
Synonym

Mucin 1,MUC1,CD227,EMA,H23AG,KL-6,MAM6,MUC-1,SEC,MUC-1,X,MUC1,ZD,PEM,PEMT,PUM,CA15-3,Episialin

Source

Biotinylated Human Mucin-1 (890-1158), His,Avitag(MU1-H82E5) is expressed from human 293 cells (HEK293). It contains AA Ser 890 - Gly 1158 (Accession # [P15941-1](#)).
Predicted N-terminus: Ser 890 (partial α chain) & Ser 1098 (partial β chain)

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag.
The mature form of Mucin-1 is a non-covalent heterodimeric complex with the proteolytically cleaved partial α and partial β chain. Each partial α and partial β chain has a calculated MW of 21.3 kDa (partial α chain) and 10.2 kDa (partial β chain).The protein migrates as 45-70 kDa (partial glycosylated α chain), 11 kDa and 14-15 kDa (partial glycosylated β chain) under reducing (R) condition (SDS-PAGE).

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.

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

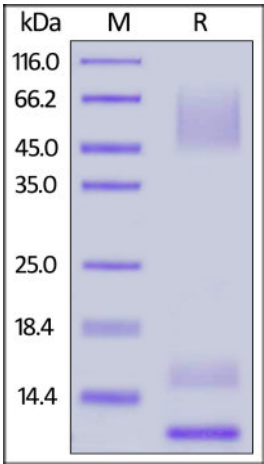
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

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:

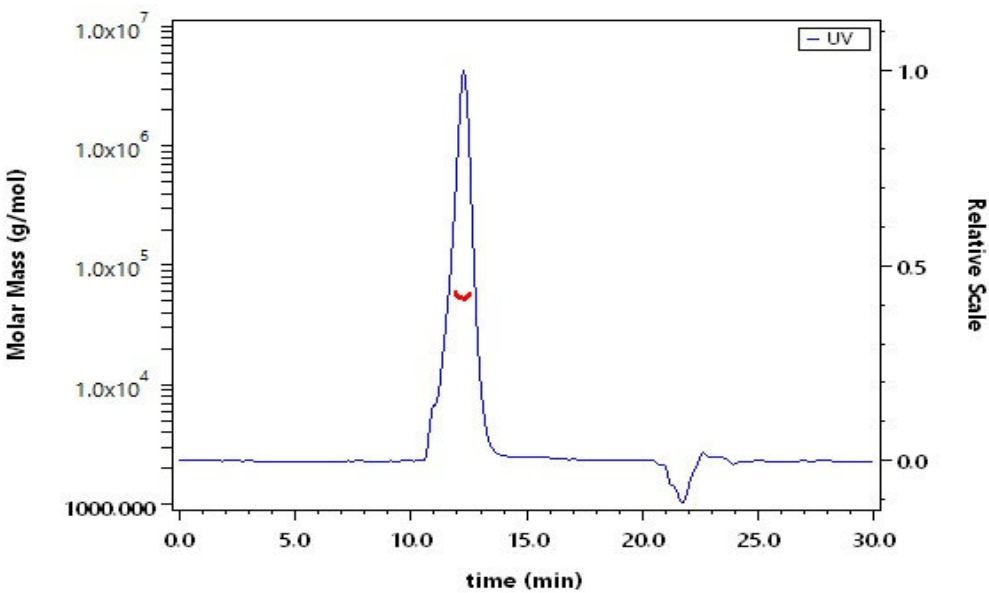
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human Mucin-1 (890-1158), 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%.

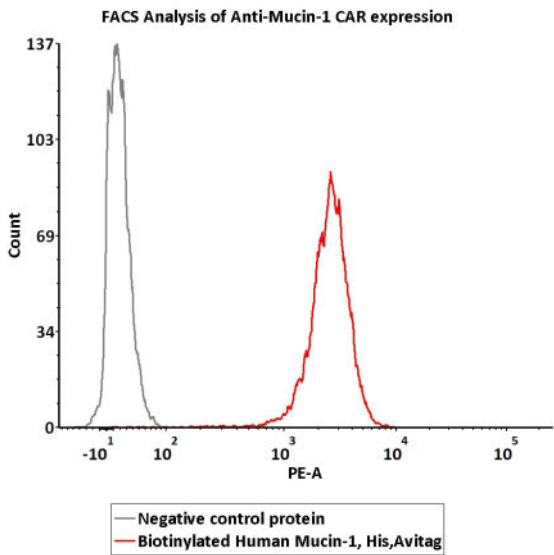
SEC-MALS



The purity of Biotinylated Human Mucin-1 (890-1158), His,Avitag (Cat. No. MU1-H82E5) is more than 95% and the molecular weight of this protein is around 45-60 kDa verified by SEC-MALS.
[Report](#)



Bioactivity-FACS



2e5 of Anti-Mucin-1 CAR-293 cells were stained with 100 μ L of 0.1 μ g/mL of Biotinylated Human Mucin-1, His,Avitag (Cat. No. MU1-H82E5) and negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (Routinely tested).

Background

Membrane mucins have several functions in epithelial cells including cytoprotection, extravasation during metastases, maintenance of luminal structure, and signal transduction. MUC17, contains an extended, repetitive extracellular glycosylation domain and a carboxyl terminus with two EGF-like domains, a SEA module domain, a transmembrane domain, and a cytoplasmic domain with potential serine and tyrosine phosphorylation sites. Interacts via its C-terminus with PDZK1 and this interaction appears important for proper localization. Probably plays a role in maintaining homeostasis on mucosal surfaces.

