

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

Human Mucin-1 (890-1158), His Tag(MU1-H52H9) is expressed from human 293 cells (HEK293). It contains AA Ser 890 - Gly 1158 (Accession # [P15941-1](#)). Predicted N-terminus: Ser 890 (partial  $\alpha$  chain) & Ser 1098 (partial  $\beta$  chain)

Molecular Characterization

Mucin-1(Ser 890 - Gly 1158)  
P15941-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus. The mature form of Mucin-1 is a non-covalent heterodimeric complex with the proteolytically cleaved partial  $\alpha$  and partial  $\beta$  chain. Each partial  $\alpha$  and partial  $\beta$  chain has a calculated MW of 21.3 kDa (partial  $\alpha$  chain) and 8.4 kDa (partial  $\beta$  chain). The protein migrates as 40-80 kDa (partial glycosylated  $\alpha$  chain) and 10 kDa (partial  $\beta$  chain) when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.  
>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.  
Contact us for customized product form or formulation.

Reconstitution

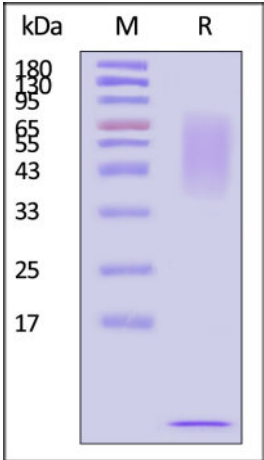
Please see Certificate of Analysis for specific instructions.  
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

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:

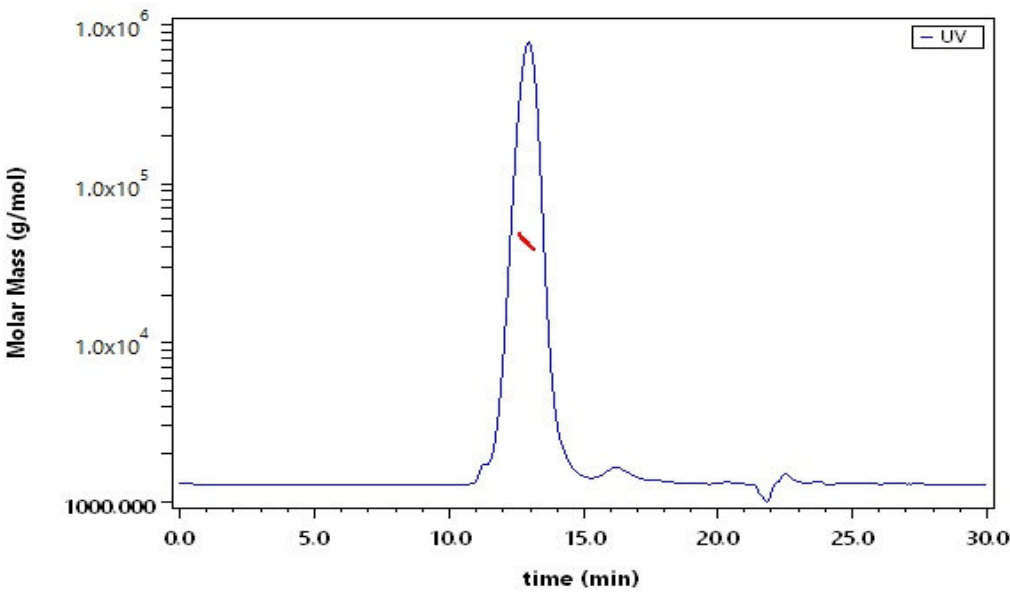
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Mucin-1 (890-1158), His Tag 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

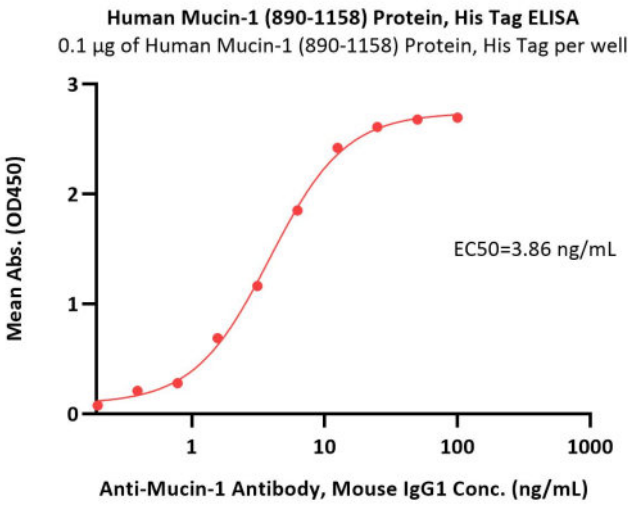


The purity of Human Mucin-1 (890-1158), His Tag (Cat. No. MU1-H52H9) is more than 95% and the molecular weight of this protein is around 40-55 kDa verified by SEC-MALS.  
[Report](#)

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Immobilized Human Mucin-1 / MUC-1 (890-1158) Protein, His Tag (Cat. No. MU1-H52H9) at 1 µg/mL (100 µL/well) can bind Anti-Mucin-1 Antibody, Mouse IgG1 with a linear range of 0.4-6 ng/mL (QC 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.

