

**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  $\alpha$  chain) & Ser 1098 (partial  $\beta$  chain)

**Molecular Characterization**

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

Poly-his

Avi

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  $\alpha$  and partial  $\beta$  chain. Each partial  $\alpha$  and partial  $\beta$  chain has a calculated MW of 21.3 kDa (partial  $\alpha$  chain) and 10.2 kDa (partial  $\beta$  chain). The protein migrates as 45-70 kDa (partial glycosylated  $\alpha$  chain), 11 kDa and 14-15 kDa (partial glycosylated  $\beta$  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.

**Endotoxin**

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

**Purity**

>90% as determined by SDS-PAGE.

**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.*

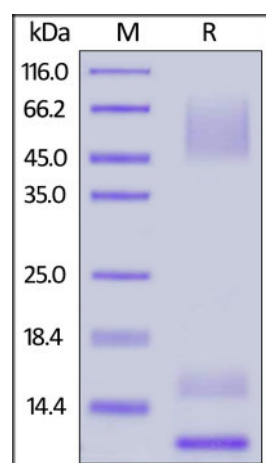
**Storage**

For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

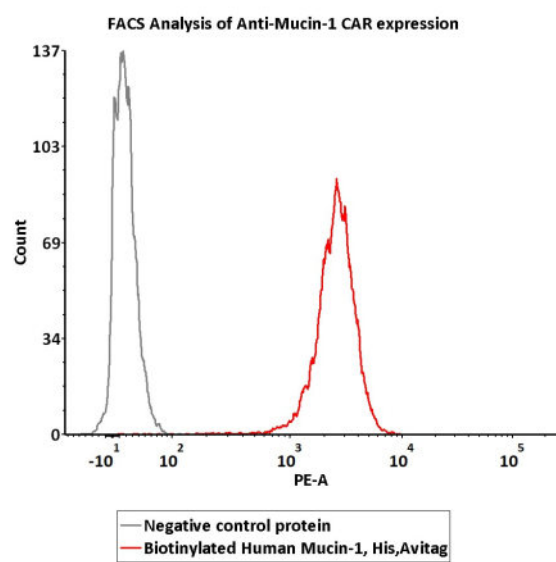
- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

**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%.

Discounts, Gifts,  
and more!



**Bioactivity-FACS**

2e5 of Anti-Mucin-1 CAR-293 cells were stained with 100  $\mu$ L of 0.1  $\mu$ 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.

**Clinical and Translational Updates**

Discounts, Gifts,  
and more!

