



## 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.

## 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

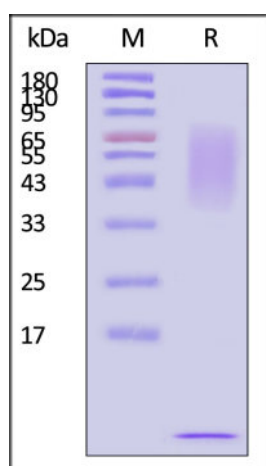
For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

*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

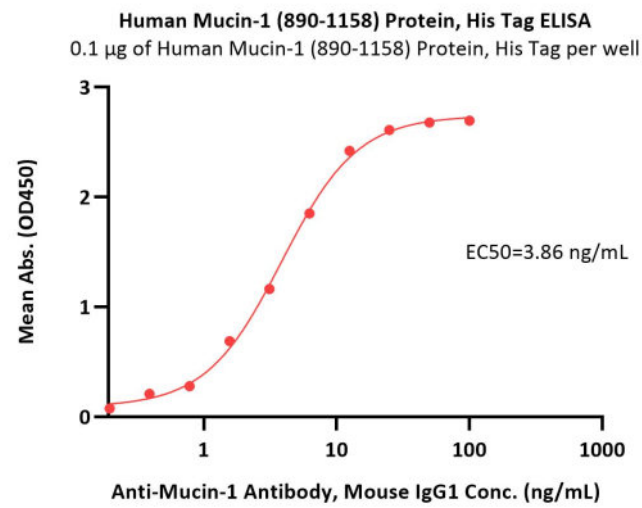


Human Mucin-1 (890-1158), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

## Bioactivity-ELISA

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and more!





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.

## Clinical and Translational Updates

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