Human Mucin-1 / MUC-1 (24-380) Protein, His Tag (MALS verified)

Catalog # MU1-H52H7

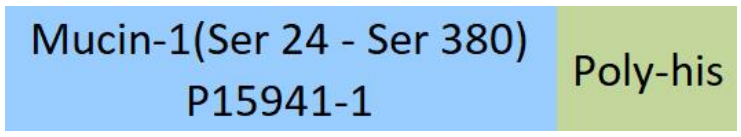
Synonym

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 (24-380) Protein, His Tag(MU1-H52H7) is expressed from human 293 cells (HEK293). It contains AA Ser 24 - Ser 380 (Accession # P15941-1).
Predicted N-terminus: Ser 24

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 35.6 kDa. The protein migrates as 55 kDa 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 μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% 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

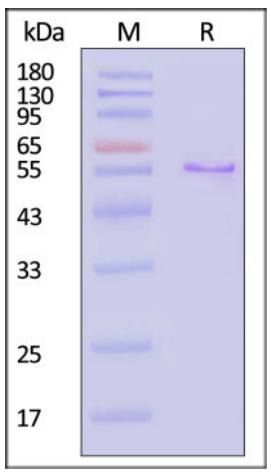
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

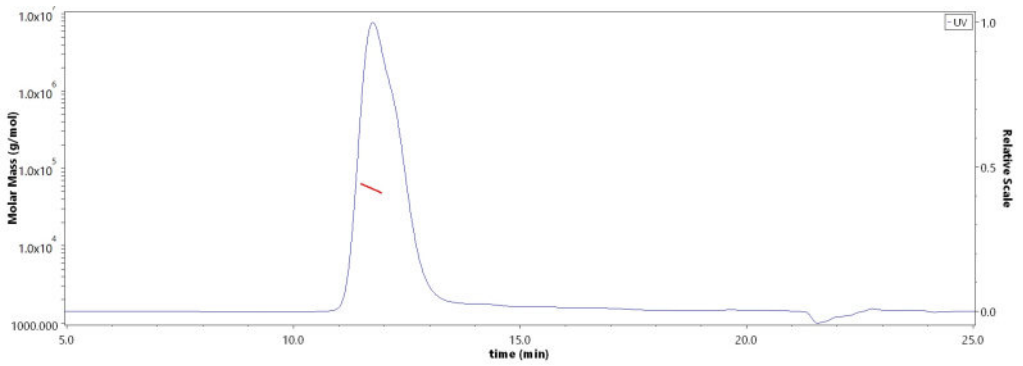
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



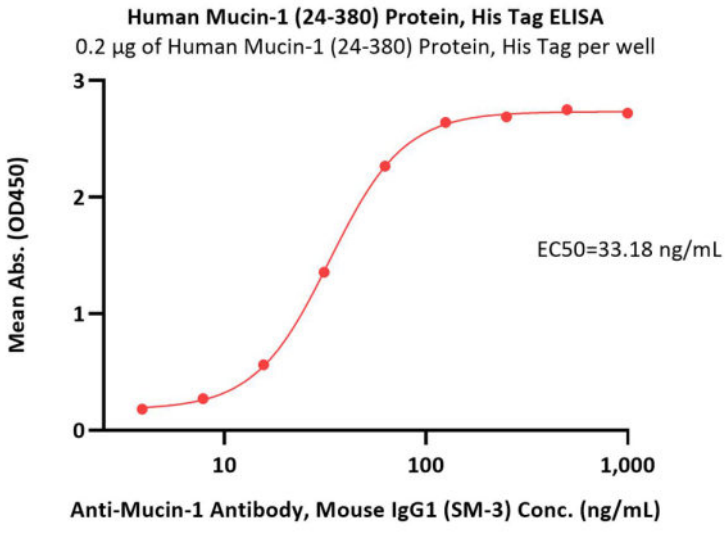
Human Mucin-1 (24-380) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human Mucin-1 (24-380) Protein, His Tag (Cat. No. MU1-H52H7) is more than 90% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human Mucin-1 (24-380) Protein, His Tag (Cat. No. MU1-H52H7) at 2 μg/mL (100 μL/well) can bind Anti-Mucin-1 Antibody, Mouse IgG1 (SM-3) with a linear range of 4-63 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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.