Catalog # MU1-H52H9



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 # <u>P15941-1</u>). Predicted N-terminus: Ser 890 (partial α chain) & Ser 1098 (partial β 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 α and partial β chain. Each partial α and partial β chain has a calculated MW of 21.3 kDa (partial α chain) and 8.4 kDa (partial β chain). The protein migrates as 40-80 kDa (partial glycosylated α chain) and 10 kDa (partial β chain) when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μ 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

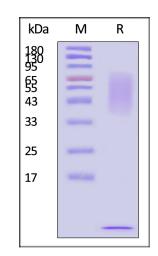
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

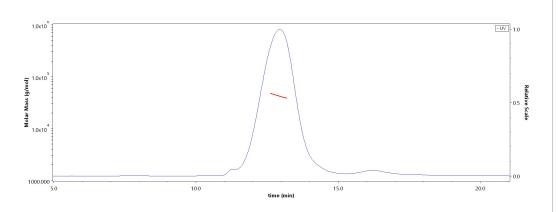
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

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 <u>Star Ribbon Pre-stained Protein Marker</u>).

SEC-MALS



The purity of Human Mucin-1 (890-1158), His Tag (Cat. No. MU1-H52H9) is more than 90% and the molecular weight of this protein is around 40-55 kDa verified by SEC-MALS.



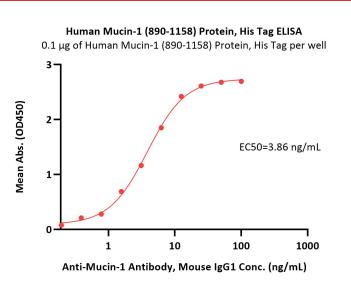
Bioactivity-ELISA







Catalog # MU1-H52H9



Immobilized Human Mucin-1 / MUC-1 (890-1158) Protein, His Tag (Cat. No. MU1-H52H9) at 1 μ g/mL (100 μ L/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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