Mouse Mucin-1 / MUC-1 (21-535) Protein, His Tag (SPR verified)

Catalog # MU1-M52H4

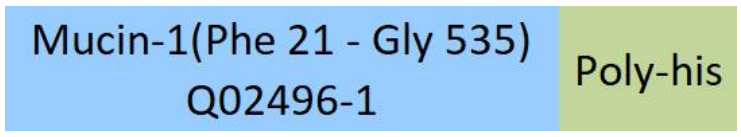
Synonym

Mucin 1,MUC1,CD227,EMA,H23AG,KL-6,MAM6,MUC-1,SEC,MUC-1,X,MUC1,ZD,PEM,PEMT,PUM,CA15-3,Episialin

Source

Mouse Mucin-1 (21-535) Protein, His Tag(MU1-M52H4) is expressed from human 293 cells (HEK293). It contains AA Phe 21 - Gly 535 (Accession # Q02496-1).
Predicted N-terminus: Phe 21

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 53.9 kDa. The protein migrates as 9 kDa and 65 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 / rFC method.

Purity

>95% as determined by SDS-PAGE.

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

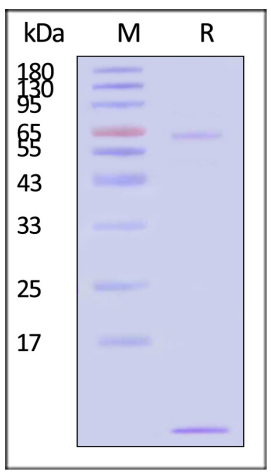
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

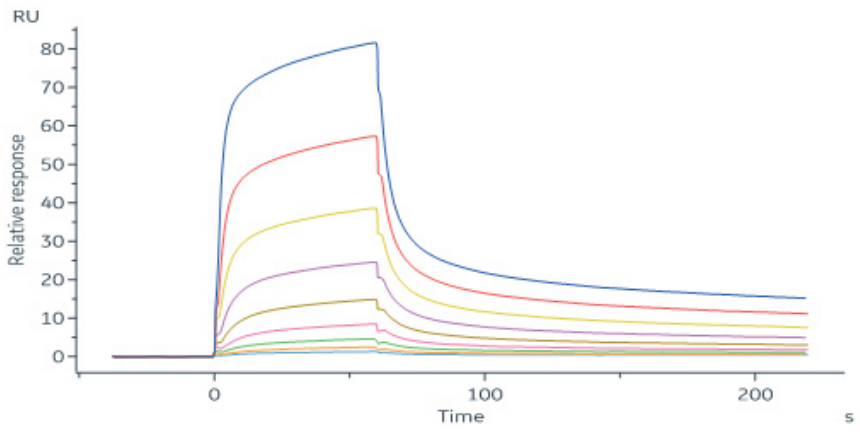
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse Mucin-1 (21-535) 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).

Bioactivity-SPR



Mouse Mucin-1 (21-535) Protein, His Tag (Cat. No. MU1-M52H4) immobilized on CM5 Chip can bind anti-mMUC1-mAb with an affinity constant of 302 nM as determined in a SPR assay (Biacore 8K) (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.