

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), Fc Tag(MU1-H5254) is expressed from human 293 cells (HEK293). It contains AA Ser 24 - Ser 380 (Accession # P15941-1). Predicted N-terminus: Ser 24

Molecular Characterization

Mucin-1(Ser 24 - Ser 380)	Fc(Pro 100 - Lys 330)
P15941-1	P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 60.2 kDa. The protein migrates as 75 kDa and 120-150 kDa when calibrated against <u>Star Ribbon Pre-stained Protein</u> <u>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.

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

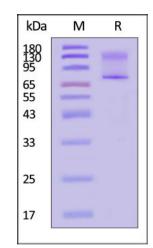
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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

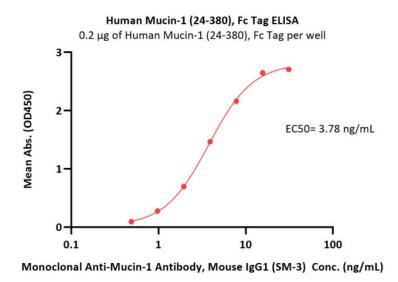


Human Mucin-1 (24-380), Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

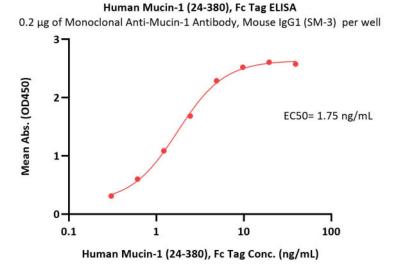
Bioactivity-ELISA







Immobilized Human Mucin-1 (24-380), Fc Tag (Cat. No. MU1-H5254) at 2 μ g/mL (100 μ L/well) can bind Monoclonal Anti-Mucin-1 Antibody, Mouse IgG1 (SM-3) with a linear range of 0.5-4 ng/mL (QC tested).



Immobilized Monoclonal Anti-Mucin-1 Antibody, Mouse IgG1 (SM-3) at 2 μ g/mL (100 μ L/well) can bind Human Mucin-1 (24-380), Fc Tag (Cat. No. MU1-H5254) with a linear range of 0.2-2 ng/mL (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

