

Synonym

MSLN, Mesothelin, MPF

Source

RFP Fusion Human Mesothelin (296-580), His Tag(MSN-HR2P4) is expressed from human 293 cells (HEK293). It contains AA Glu 296-Gly 580 (Accession # [AAH09272.1](#)).

Predicted N-terminus: Glu 296

Molecular Characterization

Mesothelin(Glu 296-Gly 580) AAH09272.1	RFP(Val 2 - Lys 244) ACD03281.1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 62.0 kDa. The protein migrates as 66-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

RFP

Excitation source: 561 nm spectral line, Yellow Green Laser

Excitation Wavelength: 561 nm

Emission Wavelength: 586/15 nm

Application

Flow cytometry (E.g. Evaluation of anti-MSLN CAR expression), fluorescence microscopy, etc.

Endotoxin

Less than 1.0 EU per µg by the LAL 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.

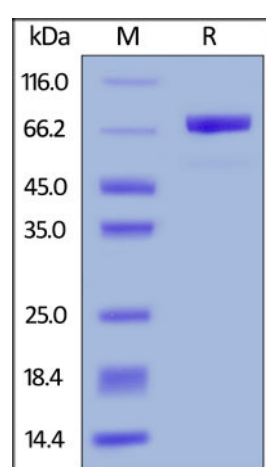
Storage

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

Please protect from light and avoid repeated freeze-thaw cycles.

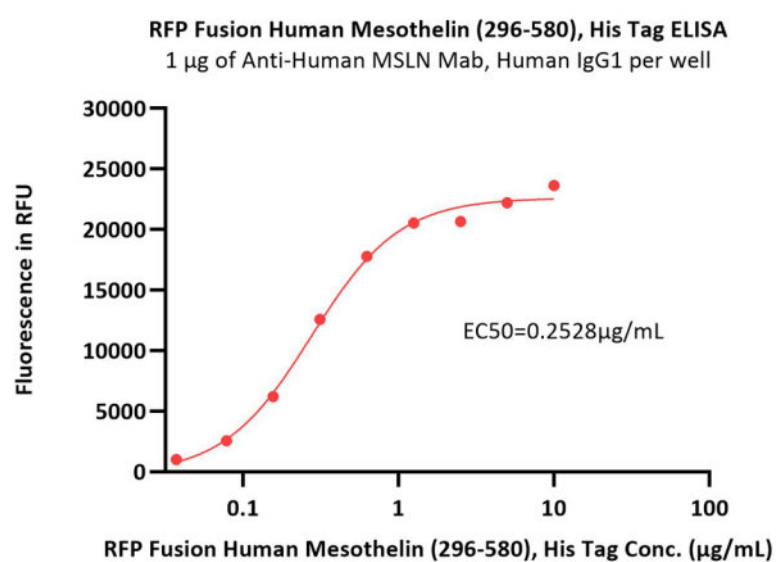
This product is stable after storage at:

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

SDS-PAGE

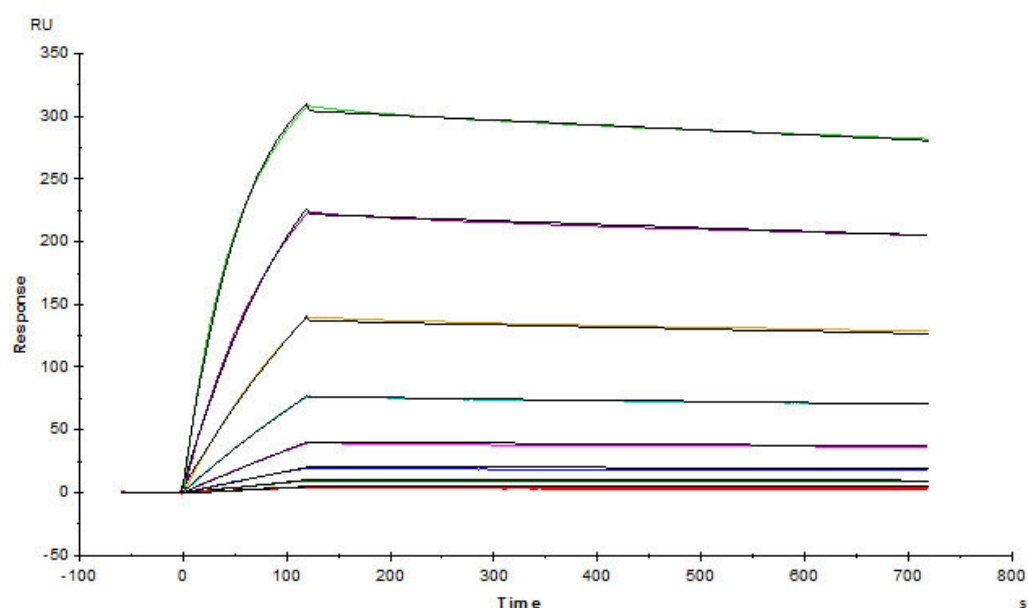
RFP Fusion Human Mesothelin (296-580), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



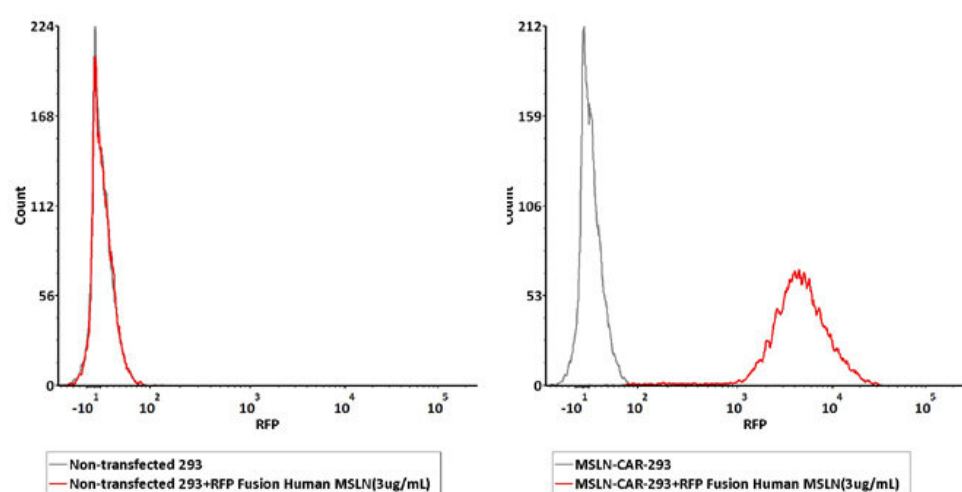
Immobilized Anti-Human MSLN Mab, Human IgG1 at 10 µg/mL (100 µL/well) can bind RFP Fusion Human Mesothelin (296-580), His Tag (Cat. No. MSN-HR2P4) with a linear range of 0.078-0.625 µg/mL (QC tested).

Bioactivity-SPR



Anti-human MSLN mAb (chimeric mouse-human IgG1) captured on CM5 chip via Anti-human IgG Fc antibodies surface, can bind RFP Fusion Human Mesothelin (296-580), His Tag (Cat. No. MSN-HR2P4) with an affinity constant of 0.304 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Bioactivity-FACS



2e5 of the MSLN-CAR-293 cells were stained with 100 µL of 3 µg/mL of RFP Fusion Human Mesothelin (296-580), His Tag (Cat. No. MSN-

HR2P4). Non-transfected 293 cells were used as negative control (QC tested).

Background

Mesothelin (MSLN) is also known as CAK1 antigen, Pre-pro-megakaryocyte-potentiating factor, which belongs to the mesothelin family. Mesothelin / MSLN can be proteolytically cleaved into the following two chains by a furin-like convertase: Megakaryocyte-potentiating factor (MPF) and the cleaved form of mesothelin. Both MPF and the cleaved form of mesothelin are N-glycosylated. Mesothelin / MSLN can interact with MUC16. The membrane-anchored forms of MSLN may play a role in cellular adhesion. MPF potentiates megakaryocyte colony formation in vitro.

Clinical and Translational Updates

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