

Synonym

MSLN, Mesothelin, MPF

Source

FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF25x) is expressed from human HEK293 cells. It contains AA Glu 296 - Gly 580 (Accession # [AAH09272.1](#)). It is the FITC labeled form of Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-H526x).

Molecular Characterization

Fc(Thr 106 - Lys 330) P01857	Mesothelin(Glu 296 - Gly 580) AAH09272.1
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This protein carries a human IgG1 Fc tag at the N-terminus

The protein has a calculated MW of 59.1 kDa. The protein migrates as 60-67 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 1-2.

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.

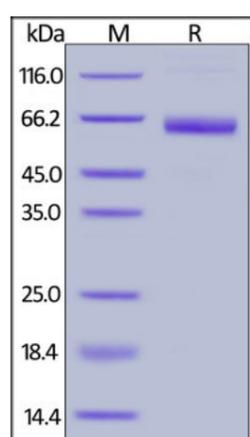
Storage

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

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

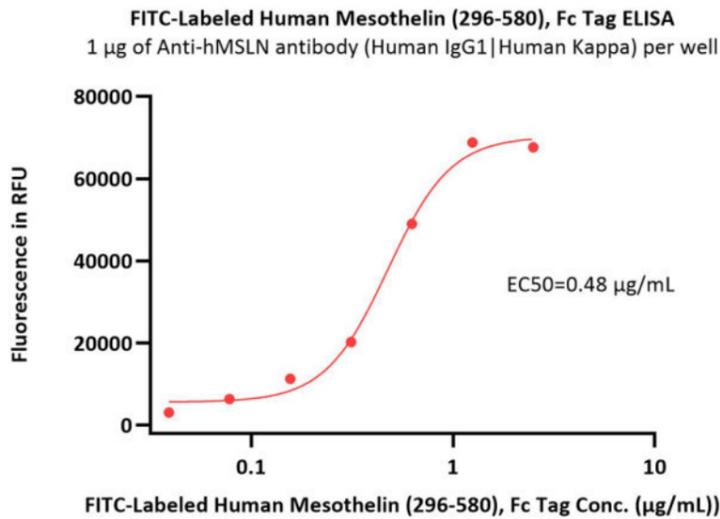
This product is stable after storage at:

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

SDS-PAGE

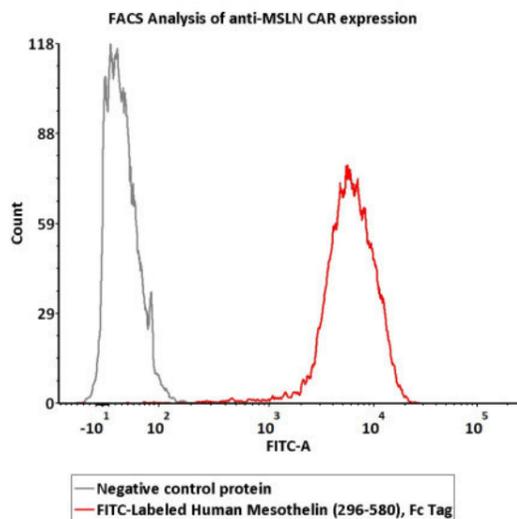
FITC-Labeled Human Mesothelin (296-580), Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Anti-Human MSLN antibody at 10 µg/mL (100 µL/well) can bind FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF25x) with a linear range of 0.039-0.625 µg/mL (QC tested).

Bioactivity-FACS



2e5 of anti MSLN-CAR-293 cells transfected with Anti-MSLN scfv were stained with 100 µL of 3 µg/mL of FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF25x) and negative control protein respectively, FITC signal was used to evaluate the binding activity (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.

