FITC-Labeled Human Mesothelin / MSLN (296-580) Protein, Fc Tag

Catalog # MSN-HF253



Synonym

MSLN,Mesothelin,MPF

Source

FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF253) is expressed from human HEK293 cells. It contains AA Glu 296 - Gly 580 (Accession # <u>AAH09272.1</u>). It is the FITC labeled form of Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-H5253).

Predicted N-terminus: Glu 296

Molecular Characterization

Mesothelin(Glu 296 - Gly 580) AAH09272.1 Fc(Pro 100 - Lys 330) P01857

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

The protein has a calculated MW of 58.62 kDa. The protein migrates as 60-70 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

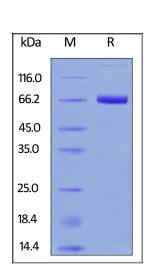
Labeling

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 1-2.5.

SDS-PAGE



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.

FITC-Labeled Human Mesothelin (296-580), Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity



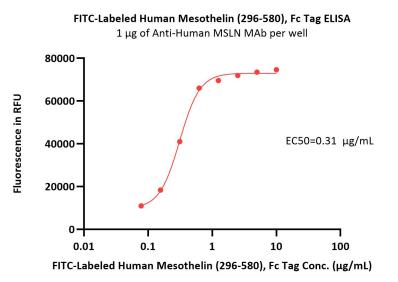
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Surprise Inside!

of the protein is greater than 95%.

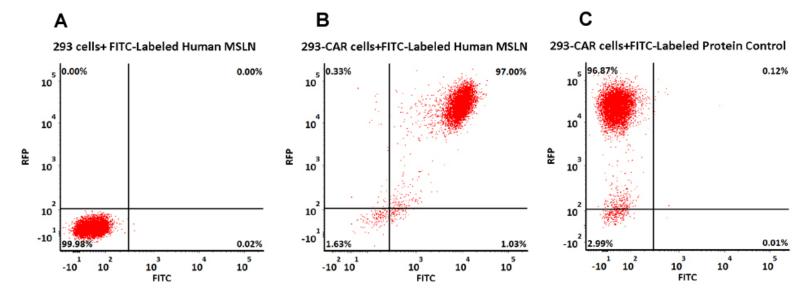
Bioactivity-ELISA



Immobilized Anti-Human MSLN MAb at 10 μ g/mL (100 μ L/well) can bind FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF253) with a linear range of 0.078-0.625 μ g/mL (Ex.488 nm/Em.535 nm) (QC tested).

Evaluation of CAR expression

FACS Analysis of Anti-MSLN CAR Expression



293 cells were transfected with anti-MSLN-scFv and RFP tag. 2e5 of the cells were stained with B. FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF253, 1 µg/mL) and C. FITC-labeled protein control. A. Non-transfected 293 cells and C. FITC-labeled protein control were used as negative control. RFP was used to evaluate CAR (anti-MSLN-scFv) expression and FITC was used to evaluate the binding activity of FITC-Labeled Human Mesothelin (296-580), Fc Tag (Cat. No. MSN-HF253) (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 interacts with MUC16. The membrane-anchored forms of MSLN may play a role in cellular adhesion. MPF potentiates megakaryocyte colony formation in vitro.

