

Synonym

MSLN, Mesothelin, MPF

Source

GFP Fusion Human Mesothelin (296-580), His Tag(MSN-HG2P4) is expressed from human 293 cells (HEK293). It contains AA Glu 296 - Gly 580 (Accession # AAH09272.1).

Predicted N-terminus: Ala 2

Molecular Characterization

GFP(Ala 2 - Thr 231) Mesothelin(Glu 296 - Gly 580)
APD15320.1 AAH09272.1

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 60.4 kDa. The protein migrates as 70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

GFP

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

Excitation Wavelength: 488 nm

Emission Wavelength: 530 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

>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

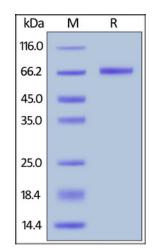
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

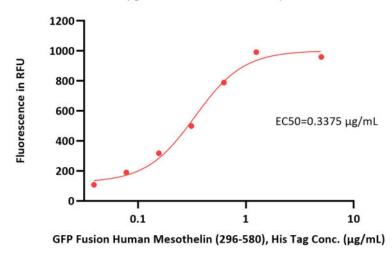


GFP Fusion Human Mesothelin (296-580), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

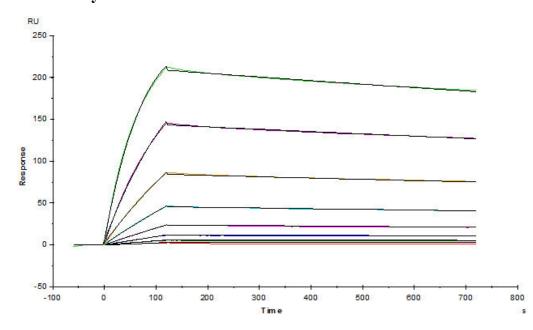


GFP Fusion Human Mesothelin (296-580), His Tag ELISA $1~\mu g$ of Anti-Human MSLN MAb per well



Immobilized Anti-Human MSLN MAb at 10 μ g/mL (100 μ L/well) can bind GFP Fusion Human Mesothelin (296-580), His Tag (Cat. No. MSN-HG2P4) with a linear range of 0.039-0.625 μ g/mL (QC tested).

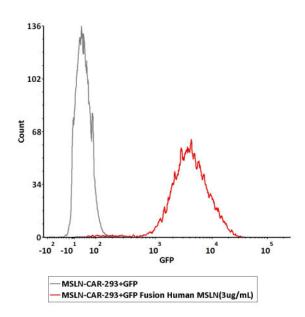
Bioactivity-SPR



Anti-human MSLN MAb (chimeric mouse-

human IgG1) captured on CM5 chip via Anti-human IgG Fc antibodies surface, can bind GFP Fusion Human Mesothelin (296-580), His Tag (Cat. No. MSN-HG2P4) with an affinity constant of 0.542 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Bioactivity-FACS



GFP Fusion Human Mesothelin / MSLN (296-580) Protein, His Tag





2e5 of the MSLN-CAR-293 cells were stained with 100 μ L of 3 μ g/mL of GFP Fusion Human Mesothelin (296-580), His Tag (Cat. No. MSN-HG2P4). GFP was used as negative control (Routinely 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.

Clinical and Translational Updates

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