

Synonym

MSLN,Mesothelin,MPF

Source

APC-Labeled Human Mesothelin (296-580), His Tag (MSN-HA2H6) is produced via conjugation of APC to Human Mesothelin (296-580), His Tag with a new generation site-specific technology under Star Staining labeling platform.

Human Mesothelin (296-580), His Tag 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	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 46.5 kDa.

Conjugate

APC

Excitation Wavelength: 640 nm

Emission Wavelength: 661 nm

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, 0.2% BSA, 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.

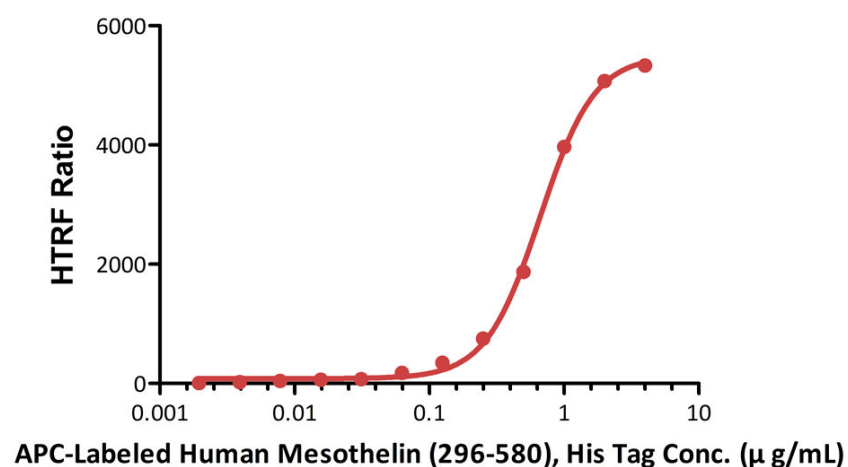
This product is stable after storage at:

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

Bioactivity-HTRF

APC-Labeled Human Mesothelin (296-580), His Tag HTRF

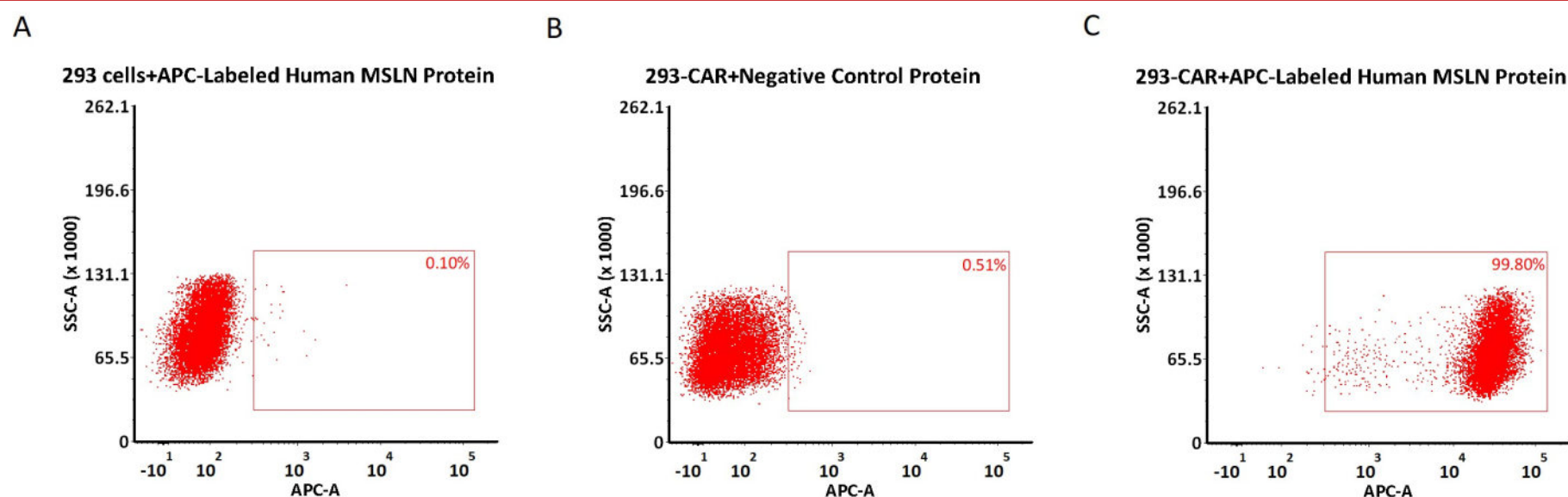
10ng/well of Monoclonal Anti-Human MSLN Antibody, Human IgG1



Mix the 10 ng /well of Monoclonal Anti-Human MSLN Antibody, Human IgG1 with the Donor PAb Anti Human IgG-Eu cryptateHuman IgG1, incubated with the Acceptor APC-Labeled Human Mesothelin (296-580), His Tag (Cat. No. MSN-HA2H6) at increasing concentration. Detection was performed with the EC50 of 0.6644 µg/mL (Routinely tested).

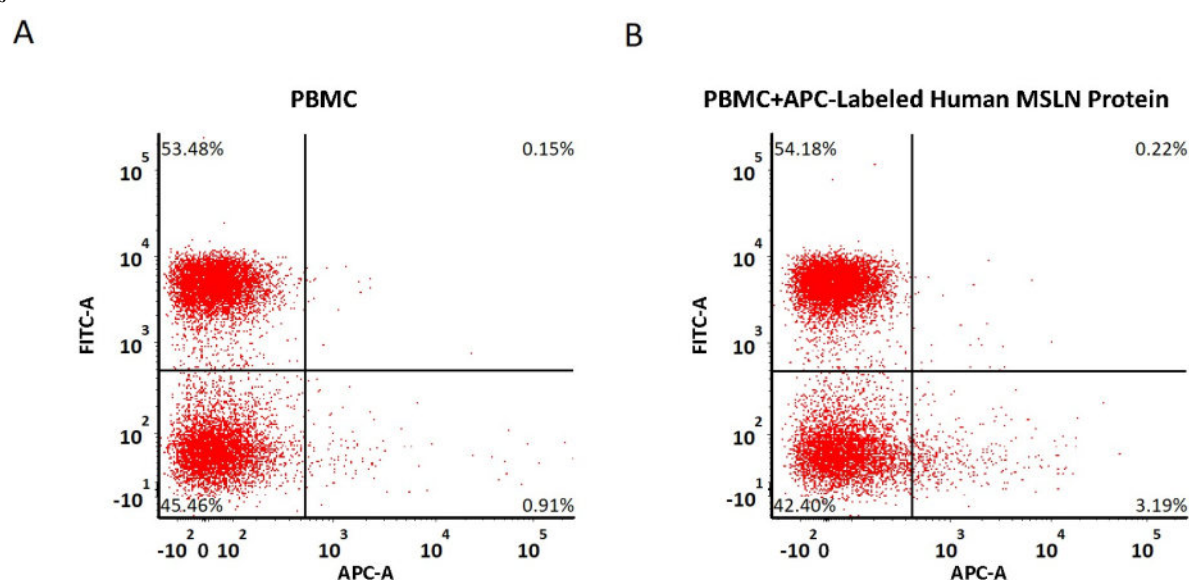
Evaluation of CAR expression

FACS Analysis of Anti-Mesothelin CAR Expression



5e5 of anti-MSLN CAR-293 cells were stained with 100 μ L of 1:50 dilution (2 μ L stock solution in 100 μ L FACS buffer) of APC-Labeled Human Mesothelin (296-580), His Tag (Cat. No.MSN-HA2H6) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). APC signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with APC-Labeled Human Mesothelin (296-580), His Tag (Cat. No. MSN-HA2H6) and anti-CD3 antibody, washed and then analyzed with FACS. FITC signal was used to evaluate the expression of CD3+ T cells in PBMCs , and APC signal was used to evaluate the non-specific binding activity to PBMCs (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.