

**Synonym**

MSLN,Mesothelin,MPF

**Source**

Alexa Fluor 555-Labeled Human Mesothelin (296-580), His Tag (MSN-HA2H8) is produced via conjugation of AF555 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 # [Q13421-3](#)). Predicted N-terminus: Glu 296

**Molecular Characterization**

Mesothelin(Glu 296 - Gly 580) Q13421-3	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 49.1 kDa.

**Conjugate**

AF555

Excitation Wavelength: 561 nm

Emission Wavelength: 572 nm

**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.

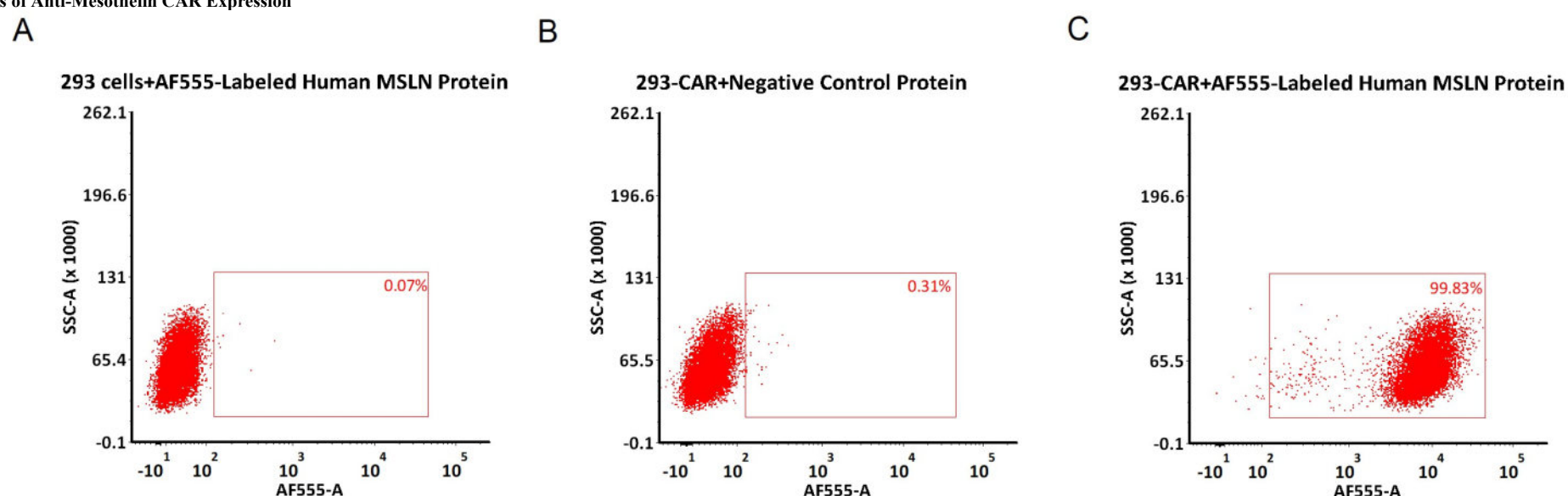
*Please protect from light and avoid repeated freeze-thaw cycles.*

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.

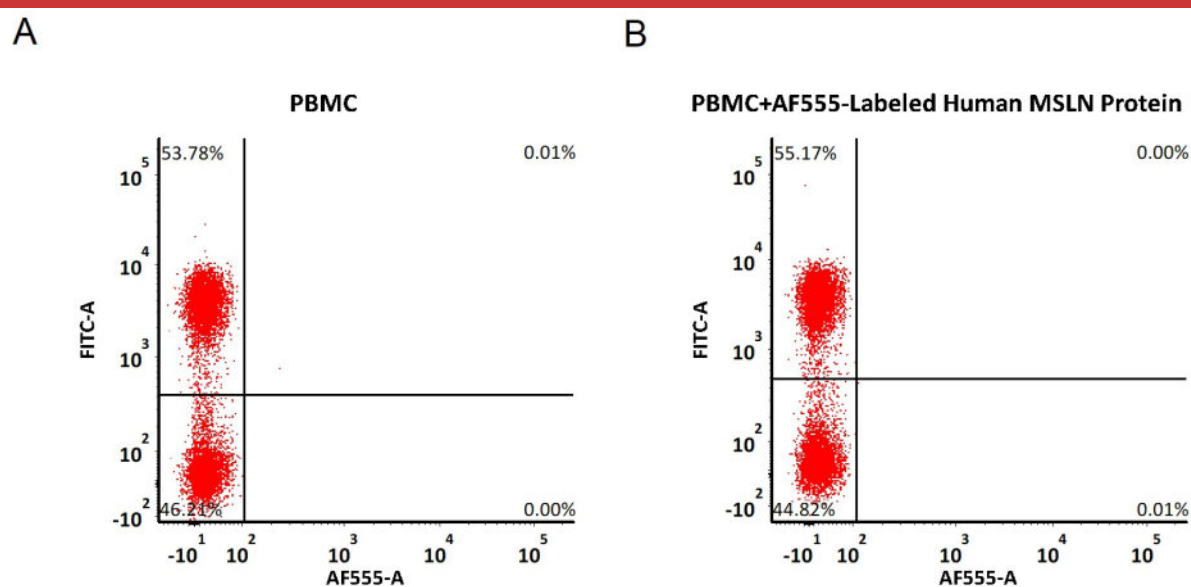
**Evaluation of CAR expression**

FACS Analysis of Anti-Mesothelin CAR Expression



5e5 of anti-MSLN CAR-293 cells were stained with 100 µL of 3 µg/mL of AF555-Labeled Human Mesothelin (296-580), His Tag (Cat. No.MSN-HA2H8) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). AF555 signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with AF555-Labeled Human Mesothelin (296-580), His Tag (Cat. No. MSN-HA2H8) and anti-CD3 antibody, washed and then analyzed with FACS. FITC signal was used to evaluate the expression of CD3<sup>+</sup> T cells in PBMCs, and AF555 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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.