# Alexa Fluor™ 647-Labeled Human Mesothelin / MSLN (296-580) Protein, His TagStar Staining

Catalog # MSN-HA2H5



## Synonym

MSLN,Mesothelin,MPF

## Source

Alexa Fluor 647-Labeled Human Mesothelin (296-580), His Tag (MSN-HA2H5) is produced via conjugation of AF647 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 # <u>AAH09272.1</u>). Predicted N-terminus: Glu 296

# Molecular Characterization

Mesothelin(Glu 296 - Gly 580) AAH09272.1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 49.1 kDa.

#### Conjugate

AF647

Excitation Wavelength: 640 nm

Emission Wavelength: 672 nm

## Purity

>95% as determined by SDS-PAGE.

#### Formulation

Lyophilized from 0.22  $\mu m$  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:

★ No non-specific binding to non-transduced PBMCs

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

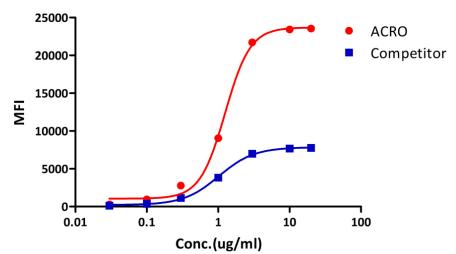
# **Star Staining** fluorescent-labeled products are developed by a new-generation site-specific labeling technology with Star Standard quality at ACROBiosystems

★ Using new-generation site-specific labeling technology ★ High specificity and sensitivity verified by flow cytometry. to maintain natural bioactivity.

 $\star$  High homogeneity and high batch-to-batch consistency.

#### **Bioactivity-FACS**

### Alexa Fluor 647-Labeled Human Mesothelin (296-580) Protein





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4/18/2025

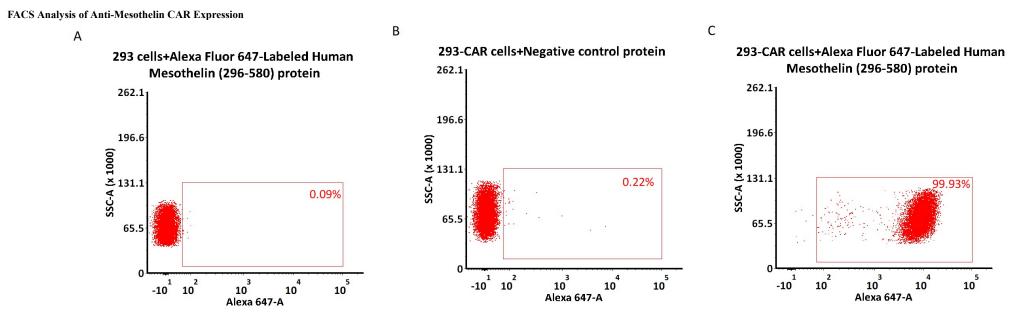
# Alexa Fluor<sup>™</sup> 647-Labeled Human Mesothelin / MSLN (296-580) Protein, His TagStar Staining



Catalog # MSN-HA2H5

The activity of Alexa Fluor 647-Labeled Human Mesothelin (296-580), His Tag (Cat. No. MSN-HA2H5) was higher than other Competitor R.

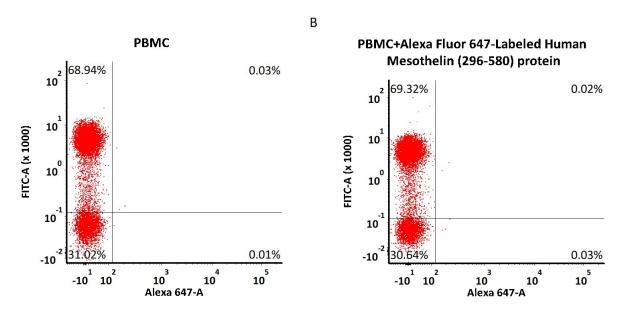
#### **Evaluation of CAR expression**



5e5 of anti-MSLN CAR-293 cells were stained with 100 µL of 1 µg/mL of Alexa Fluor 647-Labeled Human Mesothelin (296-580), His Tag (Cat. No. MSN-HA2H5) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). AF647 signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs

A



5e5 of PBMCs were stained with Alexa Fluor 647-Labeled Human Mesothelin (296-580), His Tag (Cat. No. MSN-HA2H5) 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 AF647 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 interacts with MUC16. The membrane-anchored forms of MSLN may play a

role in cellular adhesion. MPF potentiates megakaryocyte colony formation in vitro.

