

# Biotinylated Human MSLN/Mesothelin Protein

Cat. No. MSL-HM580B

## Description

<b>Source</b>	Recombinant Biotinylated Human MSLN/Mesothelin Protein is expressed from HEK293 with hFc tag and Avi tag at the C-Terminus. It contains Glu296-Gly580.
<b>Accession</b>	Q13421-2
<b>Molecular Weight</b>	The protein has a predicted MW of 61.1 kDa. Due to glycosylation, the protein migrates to 70-80 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Mesothelin, also known as MSLN, is a protein that in humans is encoded by the MSLN gene. Cloning studies showed that the mesothelin gene encodes a precursor protein that is processed to yield mesothelin which is attached to the cell membrane by a glycoposphatidylinositol linkage and a 31-kDa shed fragment named megakaryocyte-potentiating factor (MPF). Although it has been proposed that mesothelin may be involved in cell adhesion, its biological function is not known. A knockout mouse line that lacks mesothelin reproduces and develops normally.

## Assay Data

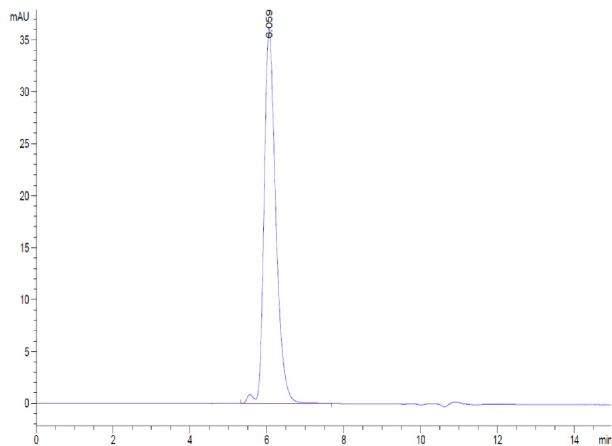
### Tris-Bis PAGE



Biotinylated Human MSLN on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



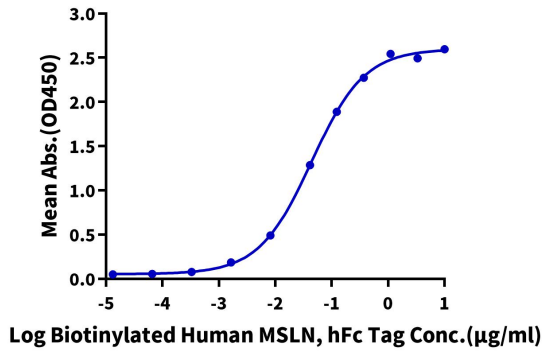
The purity of Biotinylated Human MSLN is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Biotinylated Human MSLN, hFc Tag ELISA**

0.2µg Human CA125, His Tag Per Well

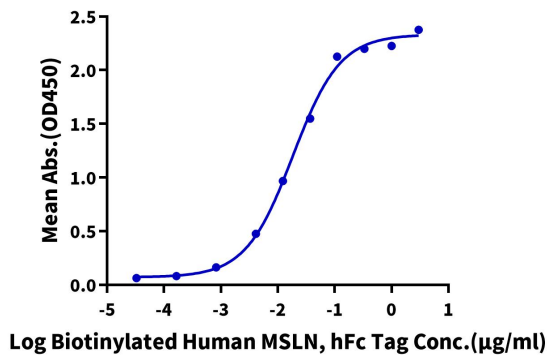


Immobilized Human CA125, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human MSLN, hFc Tag with the EC50 of 44.1ng/ml determined by ELISA (QC Test).

ELISA Data

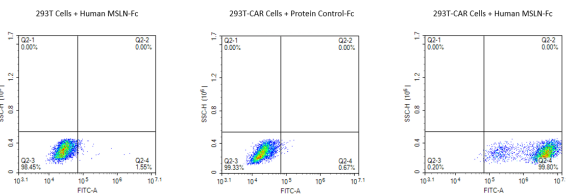
**Biotinylated Human MSLN, hFc Tag ELISA**

0.1µg Anti-MSLN Antibody, hFc Tag Per Well



Immobilized Anti-MSLN Antibody, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human MSLN, hFc Tag with the EC50 of 18.4ng/ml determined by ELISA.

FACS Data



Use Biotinylated Human MSLN-hFc-Avi protein to detect the expression rate of Anti-MSLN-CAR positive cell. 293T cells and anti-MSLN CAR-293T cells were incubated with Biotinylated human MSLN-hFc-Avi Tag. Non-transfected 293T cells and Fc-labeled protein control were used as negative control. SA-FITC was used to evaluate the binding activity of Biotinylated Human MSLN.