# Human MSLN / Mesothelin Protein (Fc Tag), Biotinylated

Catalog Number: 13128-H01H-B



## **General Information**

### Gene Name Synonym:

Mesothelin; MPF; SMRP

#### **Protein Construction:**

A DNA sequence encoding the human MSLN (Q13421-2) (Glu296-Gly580) was expressed with the fused Fc region of human IgG1 at the N-terminus. The expressed protein was biotinylated in vitro.

Source: Human

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 85 % as determined by SDS-PAGE

**Bio Activity:** 

Immobilized Anti-MSLN Antibody, human IgG1 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Recombinant Human MSLN / Mesothelin Protein (Fc Tag), Biotinylated (Cat: 13128-H01H-B), the EC50 is 0.9-2.7 ng/mL.

#### **Endotoxin:**

< 1.0 EU per µg of the protein as determined by the LAL method

## Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu

## **Molecular Mass:**

The recombinant human MSLN/Fc is a disulfide-linked homodimer. The reduced monomer comprises 545 amino acids and has a predicted molecular mass of 60.7 kDa. The apparent molecular mass of the protein is approximately 65 kDa in SDS-PAGE under reducing conditions due to glycosylation.

## Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Storage:

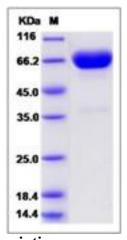
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



# **Protein Description**

Megakaryocyte potentiating factor belongs to the mesothelin family. This family is comprised by several mammalian pre-pro-megakaryocyte potentiating factor precursor (MPF) or mesothelin proteins. Mesothelin is a glycosylphosphatidylinositol-linked glycoprotein highly expressed in mesothelial cells, mesotheliomas, and ovarian cancer, but the biological function of the protein is not known. Megakaryocyte potentiating factor is highly expressed in mesotheliomas, ovarian cancers, and some squamous cell carcinomas (at protein level). It interacts with MUC16 and potentiates megakaryocyte colony formation in vitro. Megakaryocyte potentiating factor is secreted by several mesothelioma cell lines and is frequently elevated in the blood of patients with mesothelioma. Measurement of this protein may be useful in following the response of mesothelioma to treatment.

## References

1. Chang MC, et al. (2012) Mesothelin enhances invasion of ovarian cancer by inducing MMP-7 through MAPK/ERK and JNK pathways. Biochem J. 442 (2): 293-302. 2. Nelson HH, et al. (2011) The relationship between tumor MSLN methylation and serum mesothelin (SMRP) in mesothelioma. Epigenetics. 6 (8): 1029-34. 3. Bournet B, et al. (2012) Gene expression signature of advanced pancreatic ductal adenocarcinoma using low density array on endoscopic ultrasound-guided fine needle aspiration samples. Pancreatology. 12 (1): 27-34.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • http://www.sinobiological.com