

Human MSLN / Mesothelin Protein (His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 13128-H08H1

General Information

Gene Name Synonym:

Mesothelin; MPF; SMRP

Protein Construction:

A DNA sequence encoding the human MSLN (AAH09272.1) (Glu296-Gly580) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 95 % as determined by SDS-PAGE. ≥ 85 % as determined by SEC-HPLC.

Bio Activity:

1. Loaded Anti-MSLN Antibody, human IgG1 on ProA Biosensor, can bind Recombinant Human Mesothelin Protein, His Tag (Cat. No. 13128-H08H1) with an affinity constant of 0.965nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).

2. Immobilized Anti-MSLN Antibody, human IgG1 at 2 µg/mL (100 µL/well) can bind Recombinant Human MSLN / Mesothelin Protein (His Tag) (Cat: 13128-H08H1), the EC50 is 1.0-3.0 ng/mL.

Endotoxin:

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

Predicted N terminal: Glu 296

Molecular Mass:

The recombinant human MSLN consists of 296 amino acids and predicts a molecular mass of 33.62 kDa.

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

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

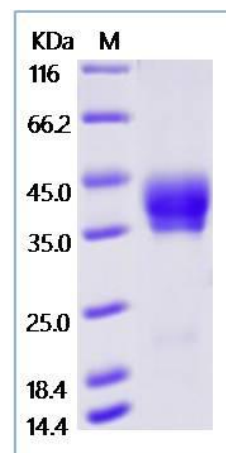
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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. *Pancreatol.* 12 (1): 27-34.