

Human MSLN / Mesothelin Protein



Sino Biological
Biological Solution Specialist

Catalog Number: 13128-HNCH

General Information

Gene Name Synonym:

Mesothelin; MPF; SMRP

Protein Construction:

A DNA sequence encoding the human MSLN (NP_005814.2) (Glu296-Gly580) was expressed with two additional amino acids (Gly & Pro) at the N-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

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

Bio Activity:

Immobilized Recombinant Human MSLN / Mesothelin Protein (Cat: 13128-HNCH) at 2 µg/mL (100 µL/well) can bind Anti-MSLN Antibody, human IgG1, the EC50 is 7.5-24 ng/mL.

Endotoxin:

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

Predicted N terminal: Gly

Molecular Mass:

The recombinant human MSLN consists 287 amino acids and predicts a molecular mass of 32.4 kDa. The apparent molecular mass of the protein is higher than the theoretical value 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

Stability & Storage:

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

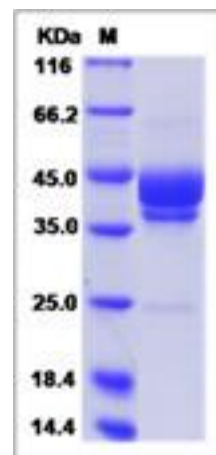
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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

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Tel: +86-400-890-9989 (Global), +1-215-583-7898 (USA), +49(0)6196 9678656 (Europe)

Website: <http://www.sinobiological.com>