Active Recombinant Human MSLN Protein, Fc-tagged, Alexa Fluor 647 conjugated

Cat. No. MSLN-528HAF647 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Alexa Fluor 647 conjugated recombinant human MSLN(Glu296 - Ser592) fused with Fc from human IgG1 at C-terminal tag was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	Glu296-Ser592
Description	Mesothelin (MSLN) is a glycosylphosphatidylinositol (GPI)-anchored glycoprotein that is expressed on mesothelial cells in the pleura, pericardium and peritoneum. It is overexpressed in mesotheliomas, ovarian and pancreatic cancers as well as in specific squamous cell carcinomas. The MSLN gene encodes a precursor protein that is cleaved into two products, megakaryocyte-potentiating factor (MPF) and MSLN. MPF is secreted and functions as a cytokine that can stimulate colony formation in bone marrow megakaryocytes. The cleaved form of MSLN remains GPI-anchored on cell-surface and may function as a cell adhesion molecule. Alternative splicing results in multiple transcript variants. Two variant forms exist; variant 1 has an eight amino acid insertion and is rarely expressed, while variant 2 is a truncated form found in cancers but rarely detected in normal individuals. MSLN interacts with CA125/MUC16 and potentiates megakaryocyte colony formation in vitro. MSLN 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

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	of mesothelioma to treatment.
Bio-activity	Binds to CA125/MUC16 and anti-MSLN monoclonal antibody, human IgG1 with high affinity. Blocks MSLN's binding to CA125/MUC16.
Molecular Mass	Calculated molecular mass (kDa): 60.1; Estimated by SDS-PAGE under reducing condition (kDa): 65-70
AA Sequence	EVEKTACPSGKKAREIDESLIFYKKWELEACVDAALLATQMDRVNAIPFTYEQLDVLK HKLDELYPQGYPESVIQHLGYLFLKMSPEDIRKWNVTSLETLKALLEVNKGHEMSPQ VATLIDRFVKGRGQLDKDTLDTLTAFYPGYLCSLSPEELSSVPPSSIWAVRPQDLDT CDPRQLDVLYPKARLAFQNMNGSEYFVKIQSFLGGAPTEDLKALSQQNVSMDLATF MKLRTDAVLPLTVAEVQKLLGPHVEGLKAEERHRPVRDWILRQRQDDLDTLGLGLQ GGIPNGYLVLDLSTTENLYFQGSTGTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLH QDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLT CLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGN VFSCSVMHEALHNHYTQKSLSLSPGK
Endotoxin	< 0.1 EU/ μg of purified recombinant protein determined by the LAL method
Purity	> 95 % by SDS-PAGE under reducing condition
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 647 via amines Excitation = 650 nm Emission = 668 nm
Storage	Upon receipt, centrifuge the product briefly before opening the vial. Store small aliquots at the temperature below -20 centigrade for long-term storage and the

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	product is stable for at least 3 months. Avoid repeapted free-thaw cycles.
Storage Buffer	Supplied at 0.5 mg/ml in sterile PBS pH 7.4 (carrier & preservative free).
Shipping	Shipped at 4 centigrade
Conjugation	Alexa Fluor 647

GENE INFORMATION

Gene Name	MSLN mesothelin [Homo sapiens]
Official Symbol	MSLN
Synonyms	MSLN; mesothelin; CAK1; MPF; CAK1 antigen; megakaryocyte potentiating factor; soluble MPF mesothelin related protein; pre-pro-megakaryocyte-potentiating factor; SMRP;
Gene ID	10232
mRNA Refseq	NM_001177355
Protein Refseq	NP_001170826
MIM	601051
UniProt ID	Q13421

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