Datasheet for ABIN2444166

Mesothelin Protein (MSLN) (AA 296-580) (Fc Tag,Biotin)

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Overview

Quantity:	200 µg
Target:	Mesothelin (MSLN)
Protein Characteristics:	AA 296-580
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Mesothelin protein is labelled with Fc Tag,Biotin.

Product Details

Brand:	MABSol®,UltraLys
Sequence:	AA 296-580
Specificity:	The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.
Characteristics:	This protein carries a human IgG1 Fc fragment at the N-terminus. The protein has a calculated MW of 59.6 kDa. The protein migrates as 60-68 kDa on a SDS-PAGE gel under reducing (R) condition due to glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	Mesothelin (MSLN)
Alternative Name:	Mesothelin (MSLN Products)
Background:	Mesothelin (MSLN) is also known as CAK1 antigen, Pre-pro-megakaryocyte-potentiating factor, which belongs to the mesothelin family. Mesothelin / MSLN can be proteolytically cleaved into the following two chains by a furin-like convertase: Megakaryocyte-potentiating factor (MPF) and the cleaved form of mesothelin. Both MPF and the cleaved form of mesothelin are N-glycosylated. Mesothelin / MSLN can interacts with MUC16. The membrane-anchored forms of MSLN may play a role in cellular adhesion. MPF potentiates megakaryocyte colony formation in vitro.
Molecular Weight:	59.1 kDa
Pathways:	EGFR Signaling Pathway, Positive Regulation of Peptide Hormone Secretion, Intracellular Steroid Hormone Receptor Signaling Pathway, Steroid Hormone Mediated Signaling Pathway, Carbohydrate Homeostasis, cAMP Metabolic Process, Regulation of G-Protein Coupled Receptor Protein Signaling, Positive Regulation of Endopeptidase Activity, Regulation of Carbohydrate Metabolic Process

Application Details

Comment:	A chemically labeled biotinylated protein with ultra sensitivity. The product is produced using a chemical labeling approach. The primary amines in the side chains of lysine residues and the N-terminus of protein are conjugated with biotins. Chemical labeling usually results in multiple biotin attachment on a single protein molecule, which could potentially lead to higher detection sensitivity.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	Lyophilized Protein should be stored at -20 °C or lower for long term storage. Upon reconstitution, working aliquots should be stored at -20 °C or -70 °C. Avoid repeated freeze-thaw cycles.

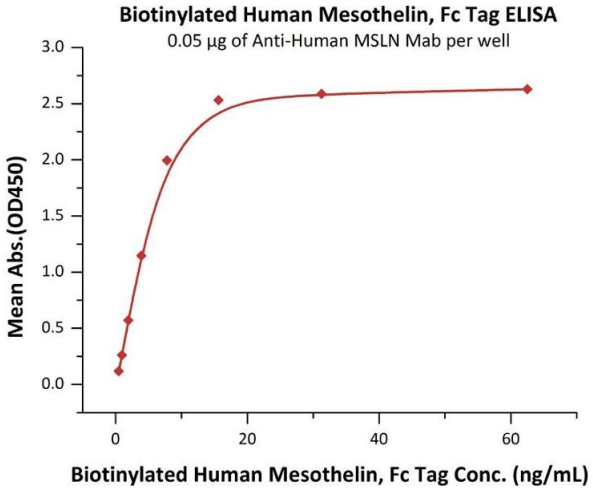
Publications

Product cited in:

Sirois, Deny, Li, Fall, Moore: "Engineered Fn3 protein has targeted therapeutic effect on mesothelin-expressing cancer cells and increases tumor cell sensitivity to chemotherapy." in: **Biotechnology and bioengineering**, (2019) (PubMed).

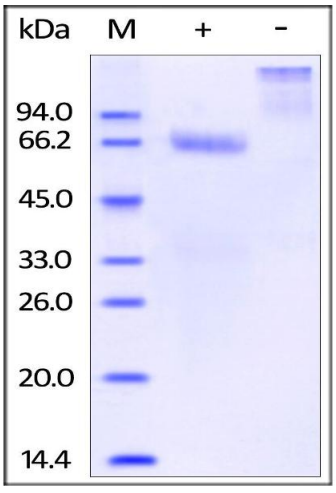
Sirois, Deny, Baierl, George, Moore: "Fn3 proteins engineered to recognize tumor biomarker mesothelin internalize upon binding." in: **PLoS ONE**, Vol. 13, Issue 5, pp. e0197029, (2018) (PubMed).

Images



ELISA

Image 1. Immobilized A MSLN Mab at 0.5 μg/mL (100 μL/well) can bind Biotinylated Human Mesothelin, Fc Tag (ABIN2444167,ABIN2444166) with a linear range of 0.5-8 ng/mL (QC tested).



SDS-PAGE

Image 2. Biotinylated Human Mesothelin (aa 296-580), Fc tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.