Data Sheet (Cat.No.TMPK-00959)

TargetMol

MSLN/Mesothelin Protein, Human, Recombinant (hFc & Avi), Biotinylated

General Information

Synonyms:	Mesothelin;MPFSMRP;MPF;CAK1;MSLN;SMR
Protein Construction:	Glu296-Gly580
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q13421-2
Molecular Weight:	61.1 kDa (predicted). Due to glycosylation, the protein migrates to 70-80 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Anti-MSLN Antibody, hFc Tag at 1μg/ml (100μl/well) on the plate. Dose response curve for Biotinylated Human MSLN, hFc Tag with the EC50 of 18.4ng/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Mesothelin, also known as MSLN, is a protein that in humans is encoded by the MSLN gene.Cloning studies showed that the mesothelin gene encodes a precursor protein that is processed to yield mesothelin which is attached to the cell membrane by a glycophosphatidylinositol linkage and a 31-kDa shed fragment named megakaryocyte-potentiating factor (MPF). Although it has been proposed that mesothelin may be involved in cell

adhesion, its biological function is not known.A knockout mouse line that lacks mesothelin reproduces and develops normally.

Reference

Adusumilli P S, et al. Regional delivery of mesothelin-targeted CAR T cell therapy generates potent and long-lasting CD4-dependent tumor immunity[J]. Science Translational Medicine, 2014, 6(261):261ra151-261ra15

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