Data Sheet (Cat.No.TMPK-01359)

TargetMol

CA125/MUC16 Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	MUC16;CA-125;CA125;FLJ14303;CA125MUC-16
Protein Construction:	Gly12660-Met12923
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q8WXI7
Molecular Weight:	31.3 kDa (predicted). Due to glycosylation, the protein migrates to 50-80 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Human CA125, His Tag at 5μg/ml (100μl/Well) on the plate. Dose response curve for Human MSLN, hFc Tag with the EC50 of 1.1μg/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE
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

MUC16, also known as the CA125 antigen, is a mucin protein that may be found in type I transmembrane or secreted forms that are used monitor the progress of epithelial ovarian cancer therapy.Thought to provide a protective, lubricating barrier against particles and infectious agents at mucosal surfaces.Binding to MSLN mediates heterotypic cell adhesion. This may contribute to the metastasis of ovarian cancer to the peritoneum by initiating cell attachment to the mesothelial epithelium via binding to MSLN.

Reference

Das S , Batra S K. Understanding the Unique Attributes of MUC16 (CA125): Potential Implications in Targeted Therapy[J]. Cancer Research, 2015:0008-5472.CAN-15-1050.

2. Rao T D , Park K J , Smith-Jones P , et al. Novel Monoclonal Antibodies Against the Proximal (Carboxy-Terminal) Portions of MUC16[J]. Applied immunohistochemistry & molecular morphology: AIMM / official publication of the Society for Applied Immunohistochemistry, 2010, 18(5):462-472.