

Synonym

CA125,CA-125,CA125MUC-16,FLJ14303,MUC16,mucin 16,mucin-16

Source

Biotinylated Human CA125, Fc,Avitag(CA5-H82F4) is expressed from human 293 cells (HEK293). It contains AA Gly 12660 - Met 12923 (Accession # [Q8WXI7-1](#)).

Predicted N-terminus: Gly 12660

Molecular Characterization

CA125(Gly 12660 - Met 12923)	Fc(Pro 100 - Lys 330)	Avi
Q8WXI7-1	P01857	

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 56.9 kDa. The protein migrates as 75-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

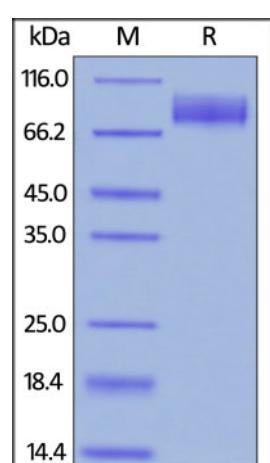
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

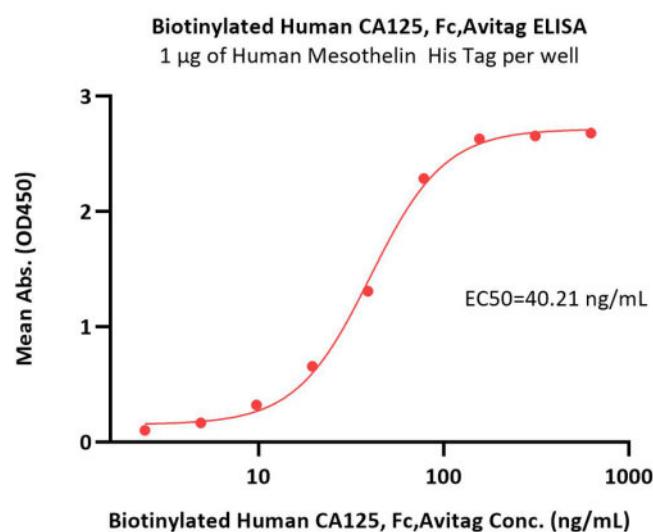
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

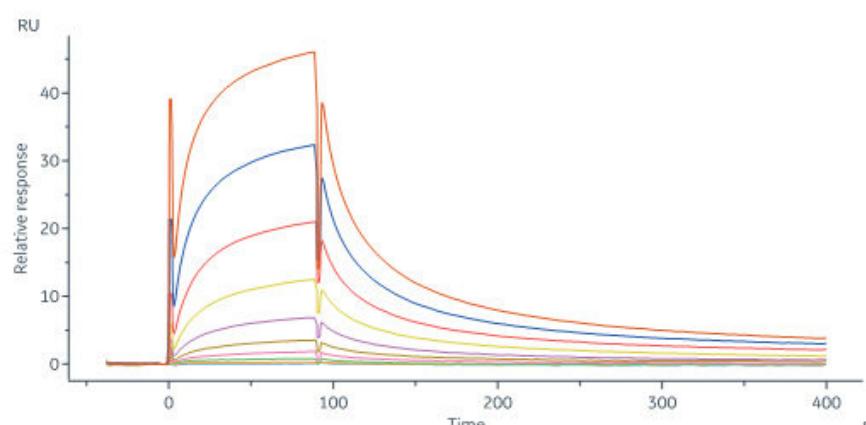
Biotinylated Human CA125, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human Mesothelin, His Tag (Cat. No. MSN-H5223) at 10 µg/mL (100 µL/well) can bind Biotinylated Human CA125, Fc,Avitag (Cat. No. CA5-H82F4) with a linear range of 2-78 ng/mL (QC tested).

Bioactivity-SPR



Human Mesothelin (296-580), His Tag, premium grade (Cat. No. MSN-H522a) immobilized on CM5 Chip can bind Biotinylated Human CA125, Fc,Avitag (Cat. No. CA5-H82F4) with an affinity constant of 0.66 µM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

The CA125, also known as the MUC16, 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. The CA 125 molecule is almost certainly a glycoprotein with a predominance of O-linkages. It is heterogeneous with regard to both size and charge, most likely due to continuous deglycosylation of side chains during its life-span in bodily fluids. It exists as a very large complex (perhaps as much as 4 million daltons) under natural conditions.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.