

### Synonym

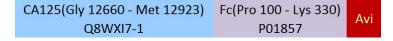
CA125,CA-125,CA125MUC-16,FLJ14303,MUC16,mucin 16,mucin-16

#### 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**



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

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<sup>TM</sup> 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 0.1 EU per µg by the LAL method / rFC 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

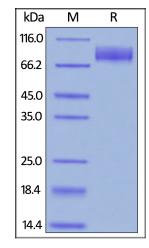
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**

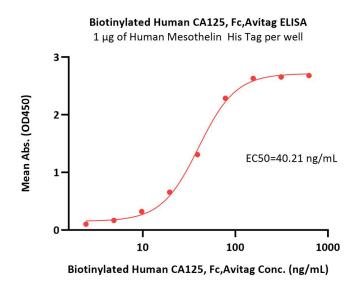


Biotinylated Human CA125, Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**

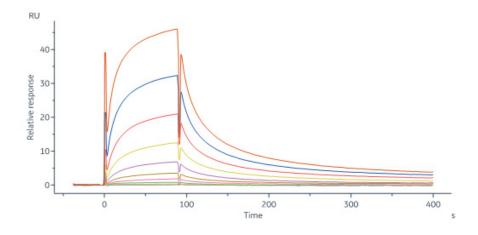






Immobilized Human Mesothelin, His Tag at 10  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human CA125, Fc,Avitag (Cat. No. CA5-H82F4) with a linear range of 2-78 ng/mL (QC tested).

## **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.

