

#### Synonym

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

### Source

Biotinylated Cynomolgus CA125 Protein, His,Avitag(CA5-C82E9) is expressed from human 293 cells (HEK293). It contains AA Pro 11544 - Pro 12188 (Accession # XP 045234963.1).

Predicted N-terminus: Pro 11544

#### **Molecular Characterization**

CA125(Pro 11544 - Pro 12188) XP\_045234963.1 Poly-his

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

The protein has a calculated MW of 75.6 kDa. The protein migrates as 90-115 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 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 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

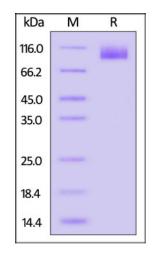
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

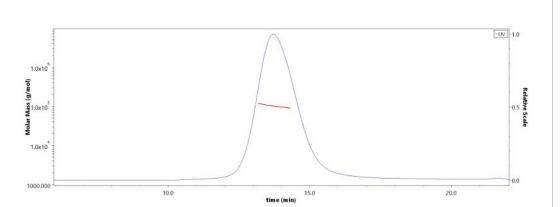
# **SDS-PAGE**



Biotinylated Cynomolgus CA125 Protein, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**

# SEC-MALS



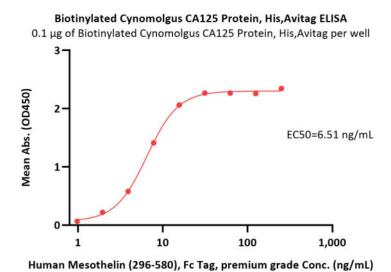
The purity of Biotinylated Cynomolgus CA125 Protein, His, Avitag (Cat. No. CA5-C82E9) is more than 95% and the molecular weight of this protein is around 90-115 kDa verified by SEC-MALS.

Report

# Biotinylated Cynomolgus CA125 / MUC16 Protein, His,Avitag™ (MALS verified)







Immobilized Biotinylated Cynomolgus CA125 Protein, His,Avitag (Cat. No. CA5-C82E9) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Human Mesothelin (296-580), Fc Tag, premium grade (Cat. No. MSN-H5253) with a linear range of 1-16 ng/mL (QC 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.