# Biotinylated Human CEACAM-5 / CD66e (593-675) Protein, His,Avitag™ (MALS verified)

Catalog # CE5-H82E4



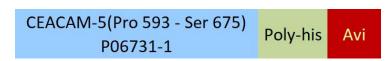
#### Synonym

CEACAM-5,CD66e,CEA,Meconium antigen 100

#### Source

Biotinylated Human CEACAM-5 (593-675) Protein, His,Avitag(CE5-H82E4) is expressed from human 293 cells (HEK293). It contains AA Pro 593 - Ser 675 (Accession # <u>P06731-1</u>).

#### **Molecular Characterization**



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 12.6 kDa. The protein migrates as 25-32 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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.

>90% 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

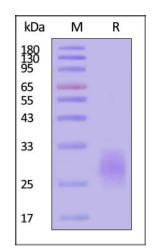
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

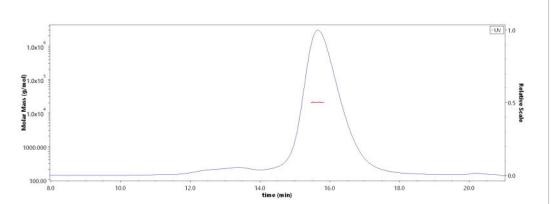
## **SDS-PAGE**



Biotinylated Human CEACAM-5 (593-675) Protein, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# **Bioactivity-ELISA**

## **SEC-MALS**



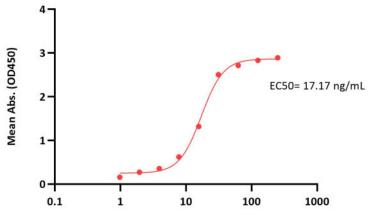
The purity of Biotinylated Human CEACAM-5 (593-675) Protein, His, Avitag (Cat. No. CE5-H82E4) is more than 90% and the molecular weight of this protein is around 16-24 kDa verified by SEC-MALS.

## Biotinylated Human CEACAM-5 / CD66e (593-675) Protein, His,Avitag™ (MALS verified)





Biotinylated Human CEACAM-5 (593-675) Protein, His,Avitag ELISA 0.1  $\mu$ g of Anti-CEACAM-5 (labetuzumab) Antibody, Human lgG1 per well



Biotinylated Human CEACAM-5 (593-675) Protein, His, Avitag Conc. (ng/mL)

Immobilized Anti-CEACAM-5 (labetuzumab) Antibody, Human IgG1 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human CEACAM-5 (593-675) Protein, His,Avitag (Cat. No. CE5-H82E4) with a linear range of 1-31 ng/mL (QC tested).

## Background

Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5) is also Carcinoembryonic antigen (CEA), Meconium antigen 100, CD antigen CD66e, CEACAM5 belongs to the immunoglobulin superfamily and CEA family. CEACAM5 contains seven Ig-like (immunoglobulin-like) domains. CEACAM5 is homodimer protein which binding of E.coli Dr adhesins leads to dissociation of the homodimer. CEACAM5 is cell surface glycoprotein that plays a role in cell adhesion and in intracellular signaling. CEACAM5 is receptor for E.coli Dr adhesins.

## **Clinical and Translational Updates**

