

Synonym

CEACAM-5,CD66e,CEA,Meconium antigen 100

Source

Biotinylated Human CEACAM-5 (593-675) Protein, His,Avitag(CE5-H82E9) is expressed from human 293 cells (HEK293). It contains AA Pro 593 - Ser 675 (Accession # <u>P06731-1</u>).

Predicted N-terminus: Pro 593

Molecular Characterization

CEACAM-5(Pro 593 - Ser 675) P06731-1 Poly-his Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM)

The protein has a calculated MW of 12.5 kDa. The protein migrates as 23-33 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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-HPLC.

Formulation

Lyophilized from 0.22 μm 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

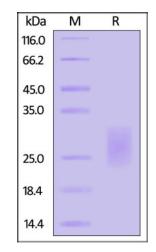
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

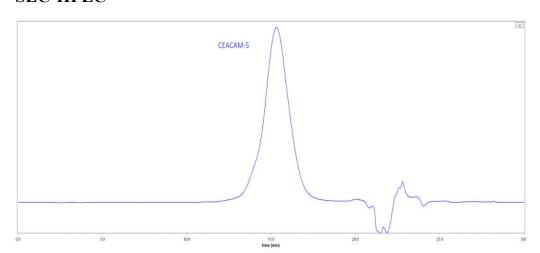
SDS-PAGE



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%.

Bioactivity-ELISA

SEC-HPLC



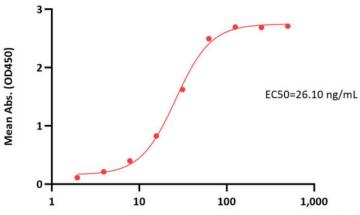
The purity of Biotinylated Human CEACAM-5 (593-675) Protein, His, Avitag (Cat. No. CE5-H82E9) was greater than 90% as determined by SEC-HPLC.

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





Biotinylated Human CEACAM-5 (593-675) Protein, His,Avitag ELISA 0.1 μg of Anti-CEACAM-5 (labetuzumab) Antibody, Human IgG1 per well



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

Immobilized Anti-CEACAM-5 (labetuzumab) Antibody, Human IgG1 at 1 μ g/mL (100 μ L/well) can bind Biotinylated Human CEACAM-5 (593-675) Protein, His,Avitag (Cat. No. CE5-H82E9) with a linear range of 2-63 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

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