Biotinylated Human CEACAM-5 / CD66e Protein, Fc,Avitag™, premium grade

Catalog # CE5-H82F6



Synonym

CEACAM-5,CD66e,CEA,Meconium antigen 100

Source

Biotinylated Human CEACAM-5 Protein, Fc,Avitag, premium grade(CE5-H82F6) is expressed from human 293 cells (HEK293). It contains AA Lys 35 - Ala 685 (Accession # <u>P06731-1</u>).

Predicted N-terminus: Lys 35

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

CEACAM-5(Lys 35 - Ala 685) Fc(Pro 100 - Lys 330) Avi P06731-1 P01857

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

The protein has a calculated MW of 99.5 kDa. The protein migrates as 150-200 kDa under reducing (R) condition, and >200 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under non-reducing (NR) 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 0.01 EU per µg by the LAL method.

Host Cell Protein

 $< 0.5 \text{ ng/}\mu\text{g}$ of protein tested by ELISA.

Host Cell DNA

<0.02 ng/µg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

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

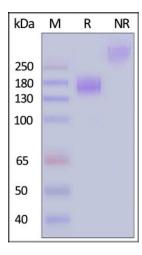
SDS-PAGE



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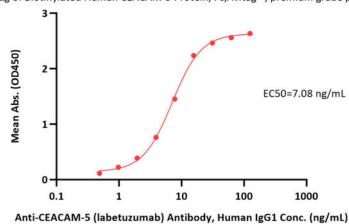




Biotinylated Human CEACAM-5 Protein, Fc, Avitag, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA

Biotinylated Human CEACAM-5 Protein, Fc,Avitag[™], premium grade ELISA 0.1 µg of Biotinylated Human CEACAM-5 Protein, Fc,Avitag[™], premium grade per well



Immobilized Biotinylated Human CEACAM-5 Protein, Fc,Avitag, premium grade (Cat. No. CE5-H82F6) at 1 μ g/mL (100 μ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μ g/well) plate can bind Anti-CEACAM-5 (labetuzumab) Antibody, Human IgG1 with a linear range of 0.5-16 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

