

Synonym

CEACAM-5,CD66e,CEA,Meconium antigen 100

Source

FITC-Labeled Human CEACAM-5, Fc Tag (CE5-HF255) is expressed from human 293 cells (HEK293). It contains AA Lys 35 - Ala 685 (Accession # [P06731-1](#)). It is the FITC labeled form of Human CEACAM-5, Fc Tag (Cat. No. CE5-H5253).

Predicted N-terminus: Lys 35

Molecular Characterization

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

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 97.8 kDa. The protein migrates as 140-160 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 1-3.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

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.

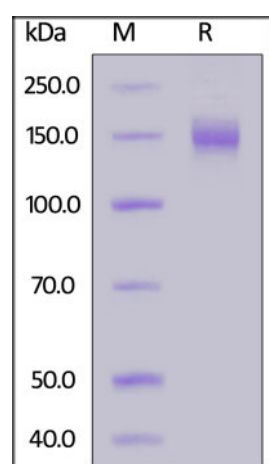
Storage

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

Please protect from light and avoid repeated freeze-thaw cycles.

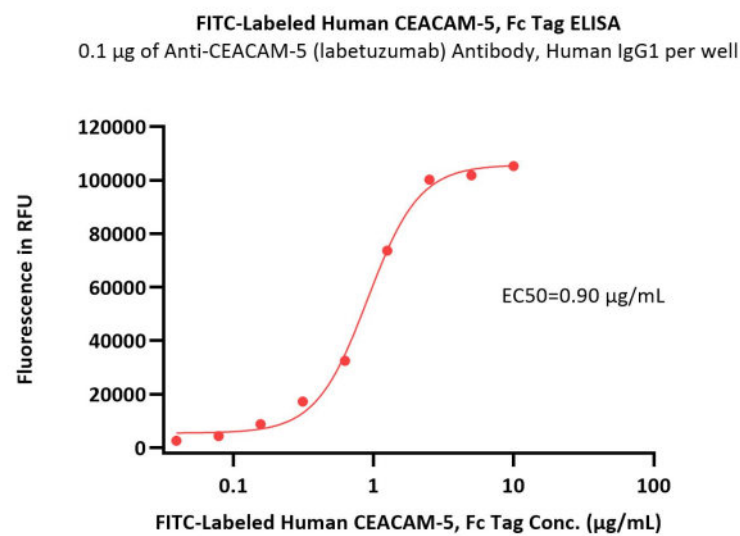
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

FITC-Labeled Human CEACAM-5, Fc Tag 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 Anti-CEACAM-5 (labetuzumab) Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human CEACAM-5, Fc Tag (Cat. No. CE5-HF255) with a linear range of 0.039-2.5 µg/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 TechSupport@acrobiosystems.com if you have any question on this product.