

Synonym

CEACAM1,CD66a,BGP,BGP1,BGPI

Source

Biotinylated Human CEACAM-1, Avitag,His Tag (CE1-H82E5) is expressed from human 293 cells (HEK293). It contains AA Gln 35 - Gly 428 (Accession # [P13688-1](#)).

Predicted N-terminus: Gln 35

Molecular Characterization

CEACAM-1(Gln 35 - Gly 428) P13688-1	Avi	Poly-his
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This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 45.9 kDa. The protein migrates as 66-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

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

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

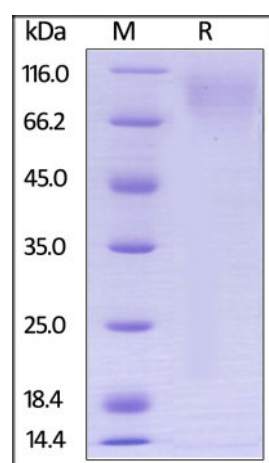
Storage

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

Please avoid repeated freeze-thaw cycles.

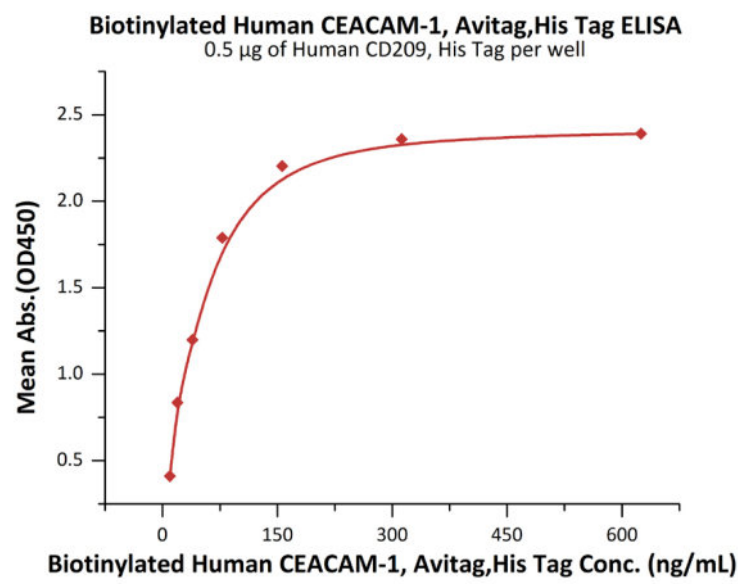
This product is stable after storage at:

- -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-1, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human CD209, His Tag (Cat. No. [CD9-H5246](#)) at 5 µg/mL (100 µL/well) can bind Biotinylated Human CEACAM-1, Avitag, His Tag (Cat. No. [CE1-H82E5](#)) with a linear range of 10-78 ng/mL (QC tested).

Background

Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) is also known as Biliary glycoprotein 1 (BGP1), CD66a, which belongs to the immunoglobulin superfamily or CEA family. CEACAM1 /CD66a contains three Ig-like C2-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain. CEACAM1 /CD66a was described as an adhesion molecule mediating cell adhesion via both homophilic and heterophilic manners, and was detected on leukocytes, epithelia, and endothelia. Studies have revealed that CEACAM1 / BGP-1 performs actions in multiple cellular processes including tissue differentiation, angiogenesis, apoptosis, metastasis, as well as the modulation of innate and adaptive immune responses.

Clinical and Translational Updates

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