



Synonym

TNFRSF17,CD269,BCM,BCMA

Source

Biotinylated Human BCMA, Fc,Avitag, premium grade(BC7-H82F0) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Ala 54 (Accession # [NP_001183.2](#)).
Predicted N-terminus: Met 1

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

BCMA(Met 1 - Ala 54) NP_001183.2	Fc(Glu 99 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 33.8 kDa. The protein migrates as 40-43 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ 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 / rFC method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.
>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 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.

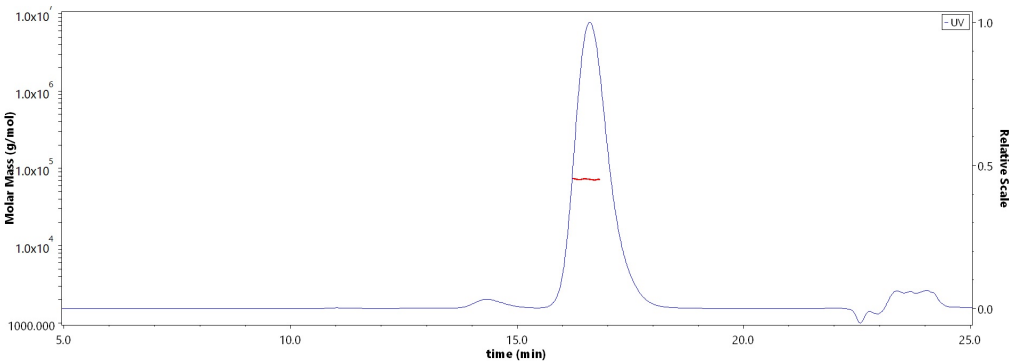
Please avoid repeated freeze-thaw cycles.

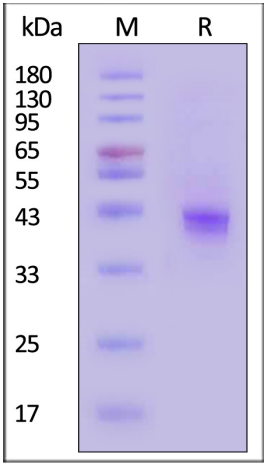
This product is stable after storage at:

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

SDS-PAGE

SEC-MALS



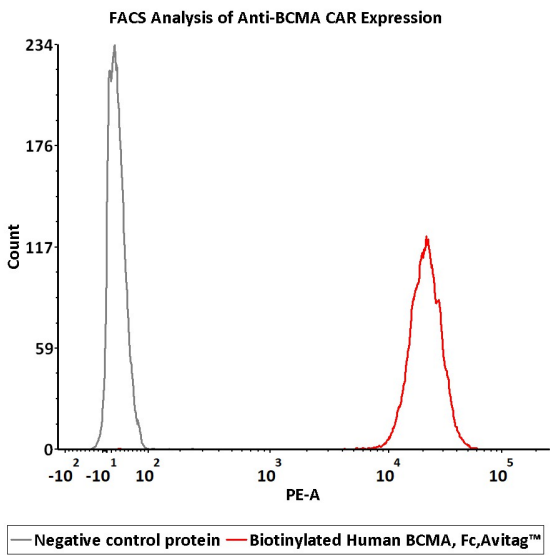


The purity of Biotinylated Human BCMA, Fc,Avitag, premium grade (Cat. No. BC7-H82F0) is more than 90% and the molecular weight of this protein is around 65-85 kDa verified by SEC-MALS.

[Report](#)

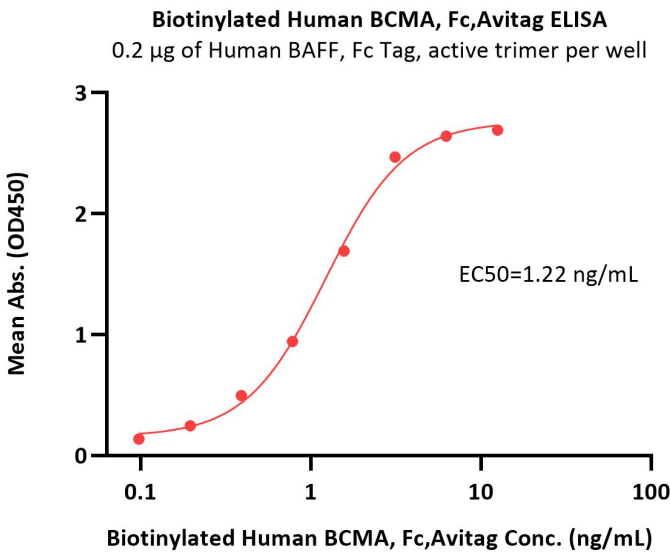
Biotinylated Human BCMA, Fc,Avitag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-FACS

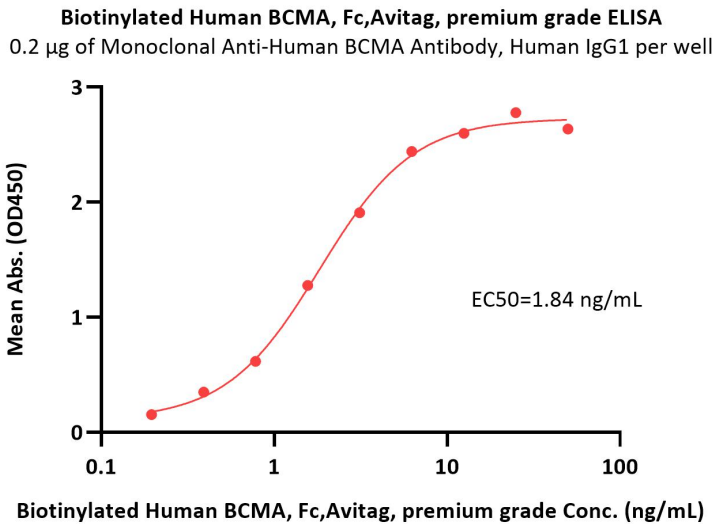


2e5 of anti-BCMA CAR-293 cells were stained with 100 μ L of 3 μ g/mL of Biotinylated Human BCMA, Fc,Avitag, premium grade (Cat. No. BC7-H82F0) and negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).

Bioactivity-ELISA



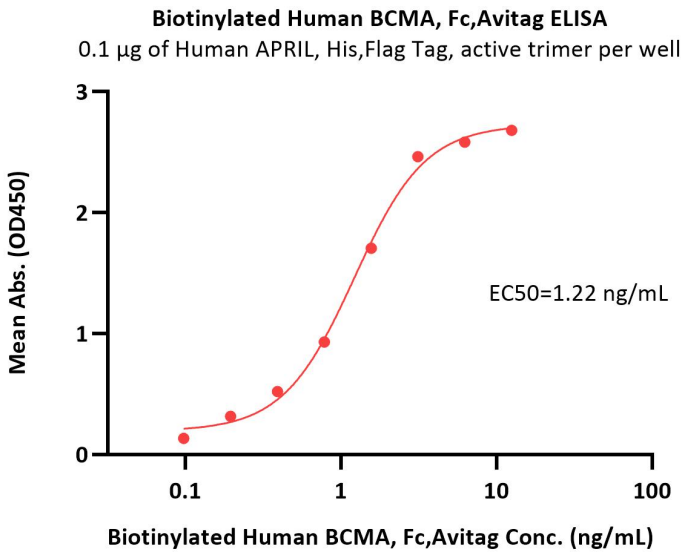
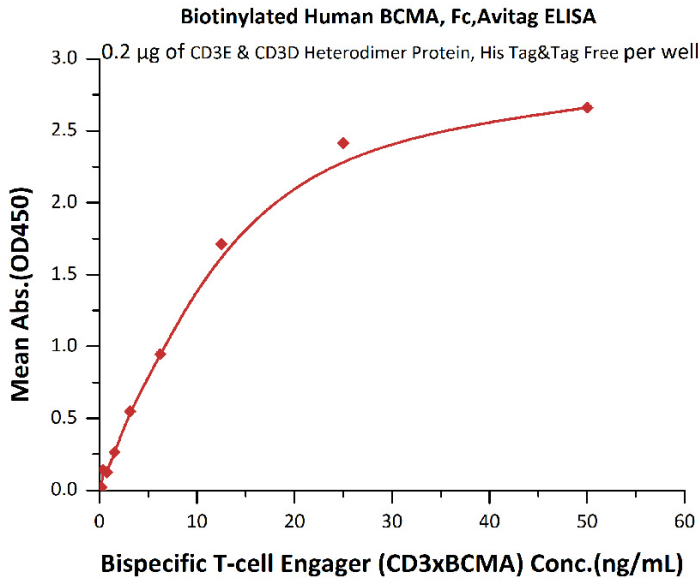
Immobilized Human BAFF, Fc Tag, active trimer (Cat. No. BAF-H5261) at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human BCMA, Fc,Avitag,



Immobilized Anti-Human BCMA Mab at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human BCMA, Fc,Avitag, premium grade (Cat. No. BC7-H82F0) with a linear range of 0.1-3 ng/mL (Routinely tested).



premium grade (Cat. No. BC7-H82F0) with a linear range of 0.1-2 ng/mL (QC tested).



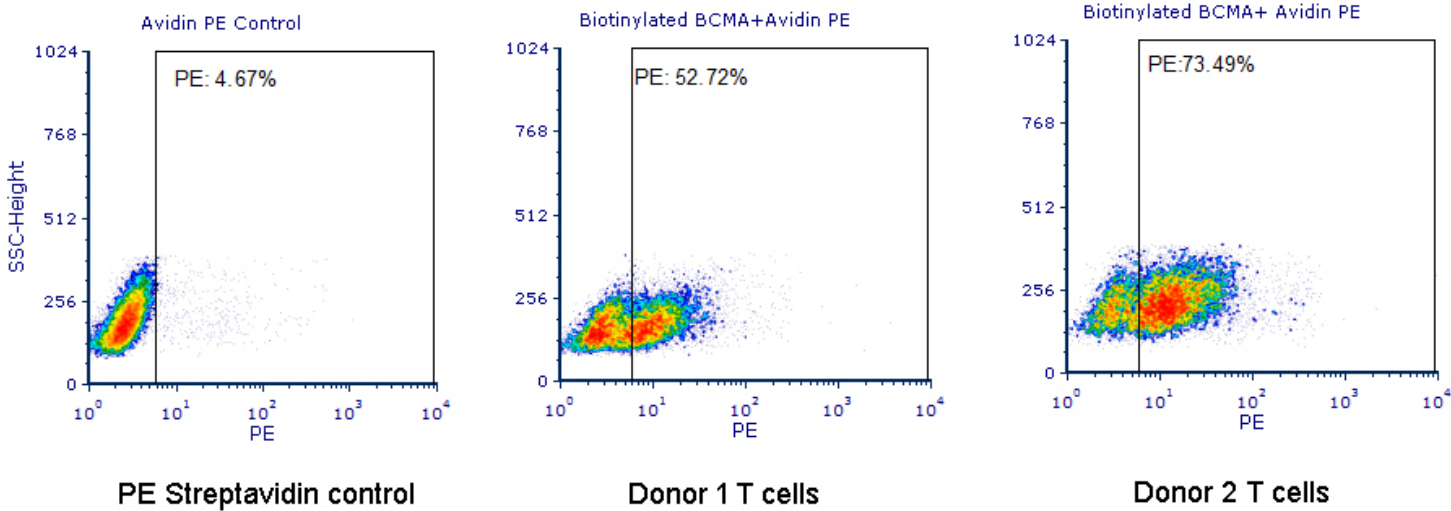
Quantitative Analysis of Bispecific T-cell Engager (CD3 X BCMA) in human serum.

Immobilized Human CD3E&CD3D Heterodimer Protein, His Tag&Tag Free (Cat. No. CDD-H52W1) at 2 µg/mL, add increasing concentrations of Bispecific T cell Engager (CD3 X BCMA) in 10% human serum and then add Biotinylated Human BCMA, Fc,Avitag, premium grade (Cat. No. BC7-H82F0) at 0.2 µg/mL. Detection was performed using HRP-conjugated streptavidin with sensitivity of 4 ng/mL (Routinely tested).

Immobilized Human APRIL, His,Flag Tag, active trimer (Cat. No. APL-H52D1) at 1 µg/mL (100 µL/well) can bind Biotinylated Human BCMA, Fc,Avitag, premium grade (Cat. No. BC7-H82F0) with a linear range of 0.1-2 ng/mL (Routinely tested).

Evaluation of CAR expression

FACS analysis of anti-BCMA CAR Expression



Human T cells were transfected with anti-BCMA CAR and cultured for 3 days. Three days post-transfection, 1e6 cells were first incubated with 50 µL Biotinylated Human BCMA, Fc,Avitag, premium grade (Cat. No. BC7-H82F0, 8 µg/mL), washed and then stained with PE Streptavidin and analyzed by flow cytometry. (Data are kindly provided by PREGENE Biopharma)

Background

Tumor necrosis factor receptor superfamily member 17 (TNFRSF17) is also known as B-cell maturation protein (BCMA), CD antigen CD269, which is a member of the TNF-receptor superfamily. TNFRSF17 contains one TNFR-Cys repeat. TNFRSF17 is expressed in mature B-cells, but not in T-cells or monocytes. TNFRSF17 is receptor for TNFSF13B/BLyS/BAFF and TNFSF13/APRIL. TNFRSF17 promotes B-cell survival and plays a role in the regulation of humoral immunity. TNFRSF17 can activate NF-kappa-B and JNK.

