

Human BCMA / TNFRSF17 Protein, Fc Tag, premium grade

Catalog # BC7-H5254



Synonym

TNFRSF17, CD269, BCM, BCMA

Source

Human BCMA, Fc Tag, premium grade (BC7-H5254) 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.

MBS-C004 is the GMP version of this BC7-H5254. These two proteins display indistinguishable performance profiles, thereby ensuring a seamless transition for end users from early preclinical stag to later clinical phases.

Molecular Characterization

BCMA(Met 1 - Ala 54) NP_001183.2	Fc(Glu 99 - Lys 330) P01857
-------------------------------------	--------------------------------

[Other Tags and Version](#) [Biotin & Other Labeled Version](#)

This protein carries a human IgG1 Fc tag at the C-terminus.
The protein has a calculated MW of 32.0 kDa. The protein migrates as 35-45 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

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.
- >95% as determined by SEC-MALS.

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:

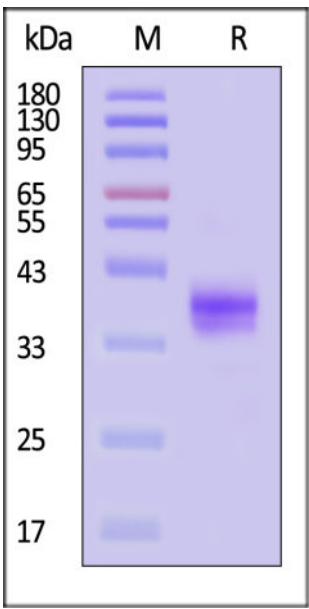
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 12 months under sterile conditions after reconstitution.

ACRO Quality Management System

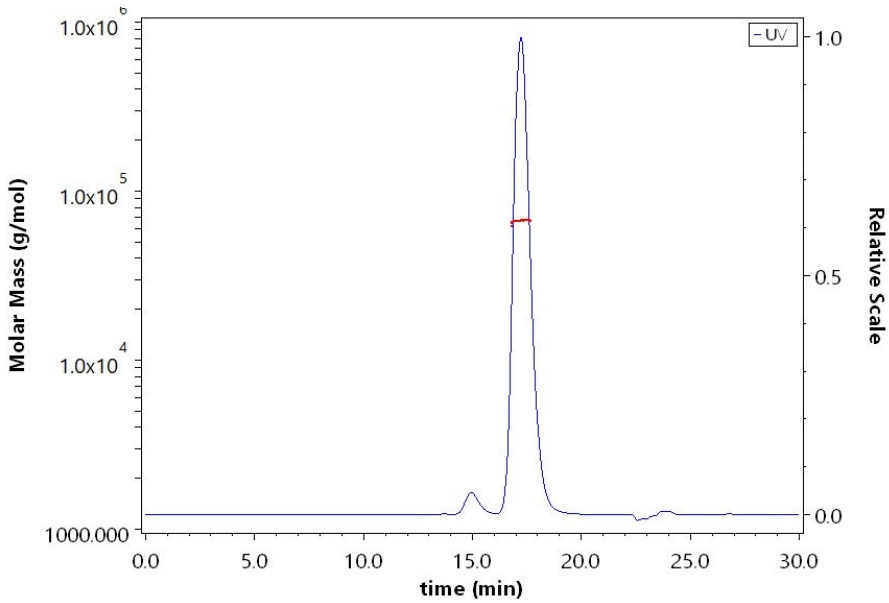
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE

SEC-MALS

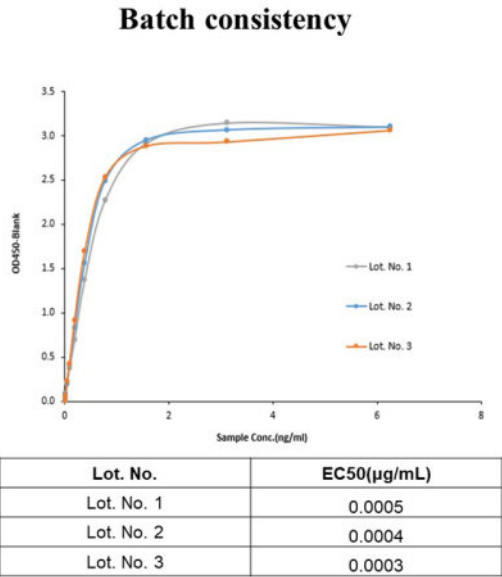
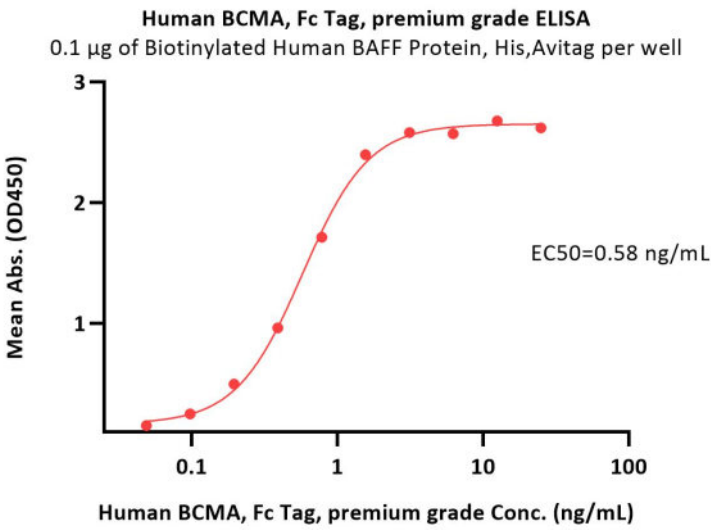


Human BCMA, Fc Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

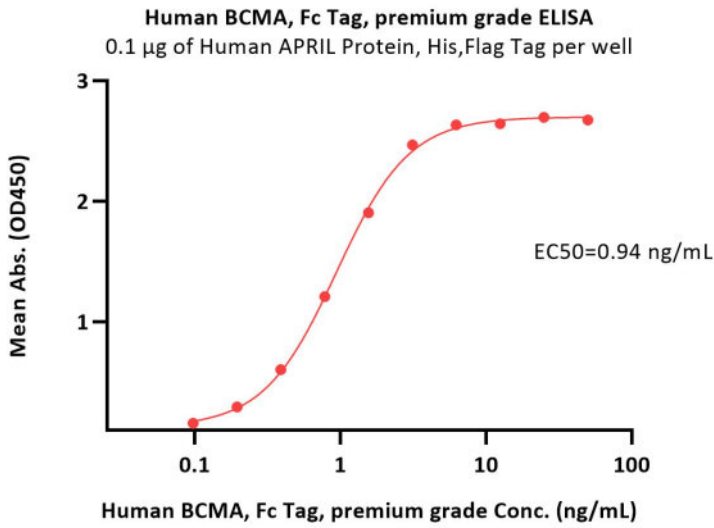
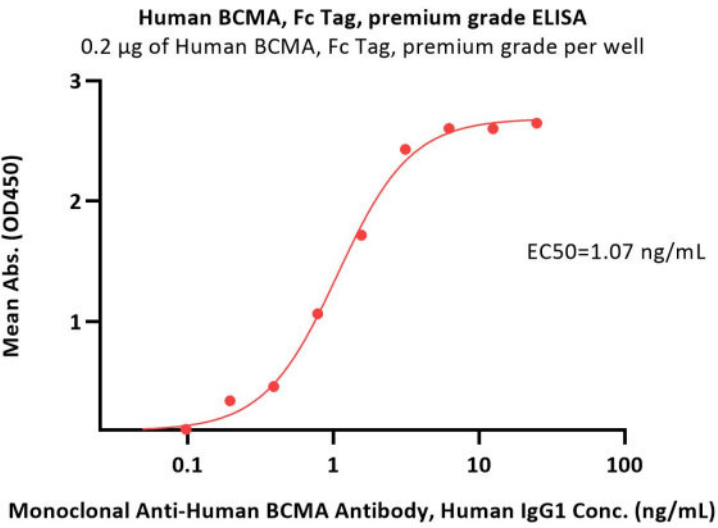


The purity of Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254) is more than 95% and the molecular weight of this protein is around 60-85 kDa verified by SEC-MALS.

Bioactivity-ELISA



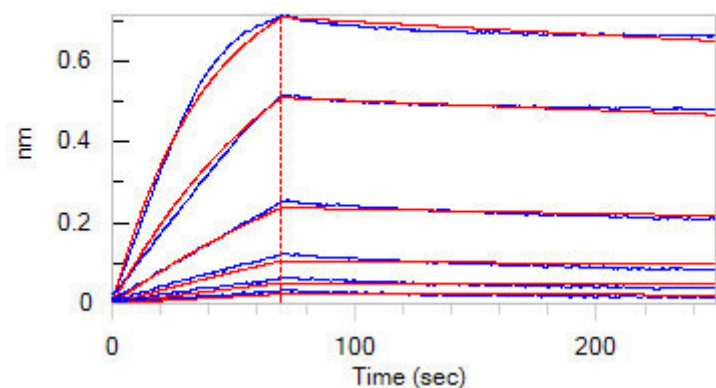
Immobilized Biotinylated Human BAFF, His,Avitag (Cat. No. BAF-H82Q2) at 1 μg/mL (100 μL/well) on streptavidin precoated (0.2 μg/well) plate, can bind Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254) with a linear range of 0.1-0.8 ng/mL (QC tested).



Immobilized Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254) at 2 μg/mL (100 μL/well) can bind Anti-Human BCMA Mab with a linear range of 0.1-1.6 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 Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254) with a linear range of 0.1-2 ng/mL (Routinely tested).

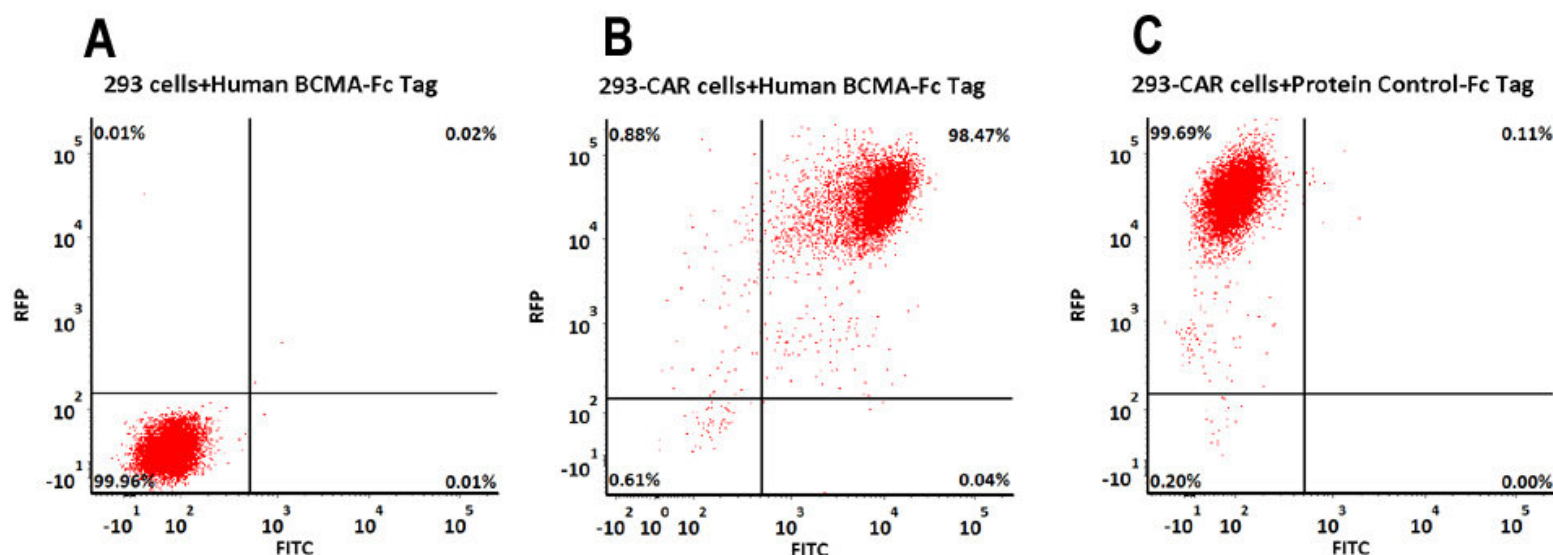
Bioactivity-BLI



Loaded Human APRIL, His,Flag Tag, active trimer (Cat. No. APL-H52D1) on HIS1K Biosensor, can bind Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254) with an affinity constant of 1.88 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Evaluation of CAR expression

FACS Analysis of Anti-BCMA CAR Expression



293 cells were transfected with anti-BCMA-scFv and RFP tag. 2e5 of the cells were first stained with B. Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254, 3 µg/mL) and C. human Fc tag protein control, followed by FITC-conjugated anti-human IgG Fc antibody. A. Non-transfected 293 cells and C. human Fc tag protein control were used as negative control. RFP was used to evaluate CAR (anti-BCMA-scFv) expression and FITC was used to evaluate the binding activity of Human BCMA, Fc Tag, premium grade (Cat. No. BC7-H5254).

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.



www.acrobiosystems.com