FITC-Labeled Human BCMA / TNFRSF17 Protein, His TagStar Staining

Catalog # BCA-HF2H3

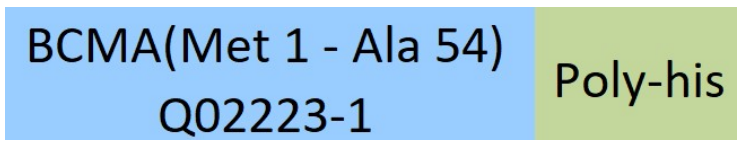
Synonym

TNFRSF17, CD269, BCM, BCMA

Source

FITC-Labeled Human BCMA, His Tag (BCA-HF2H3) is produced via conjugation of FITC to Human BCMA, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human BCMA, His Tag is expressed from human 293 cells (HEK293). It contains AA Met 1 - Ala 54 (Accession # Q02223-1).
Predicted N-terminus: Met 1

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 22.2 kDa. The protein migrates as 30-35 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

Purity

>90% as determined by SDS-PAGE.

>90% 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

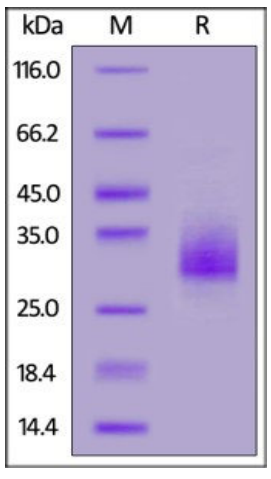
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

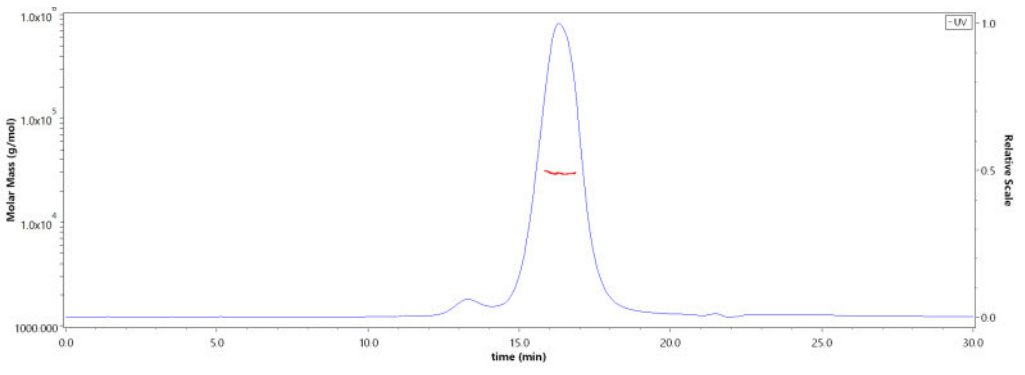
This product is stable after storage at:

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

SDS-PAGE



SEC-MALS

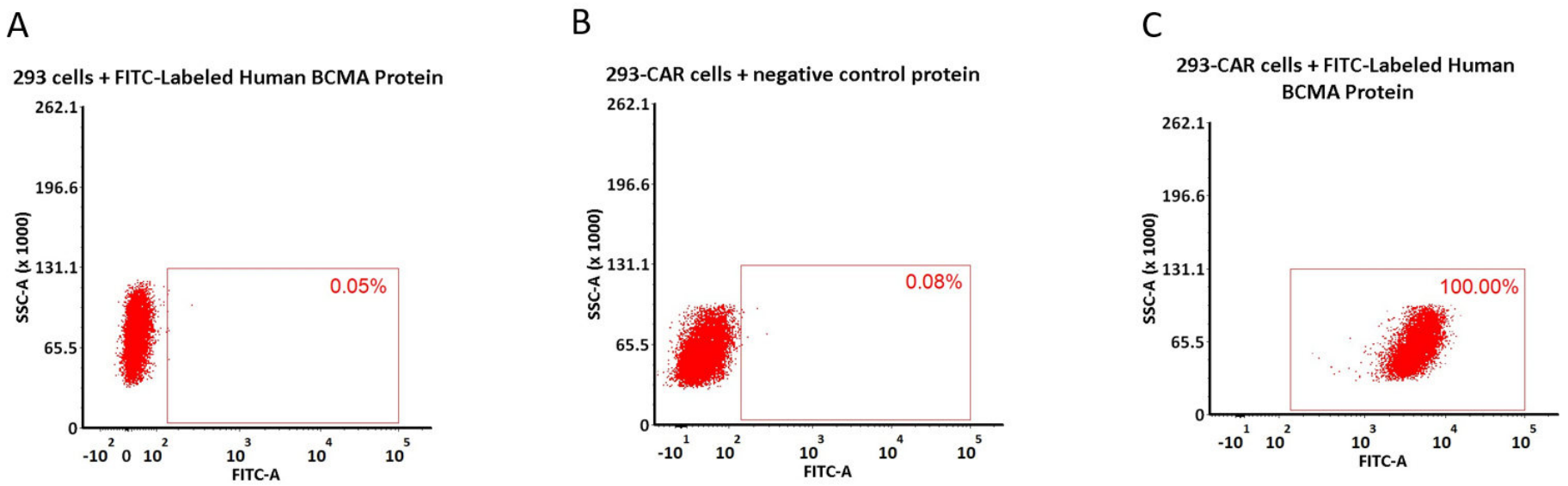


FITC-Labeled Human BCMA, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

The purity of FITC-Labeled Human BCMA, His Tag (Cat. No. BCA-HF2H3) is more than 90% and the molecular weight of this protein is around 20-34 kDa verified by SEC-MALS.
Report

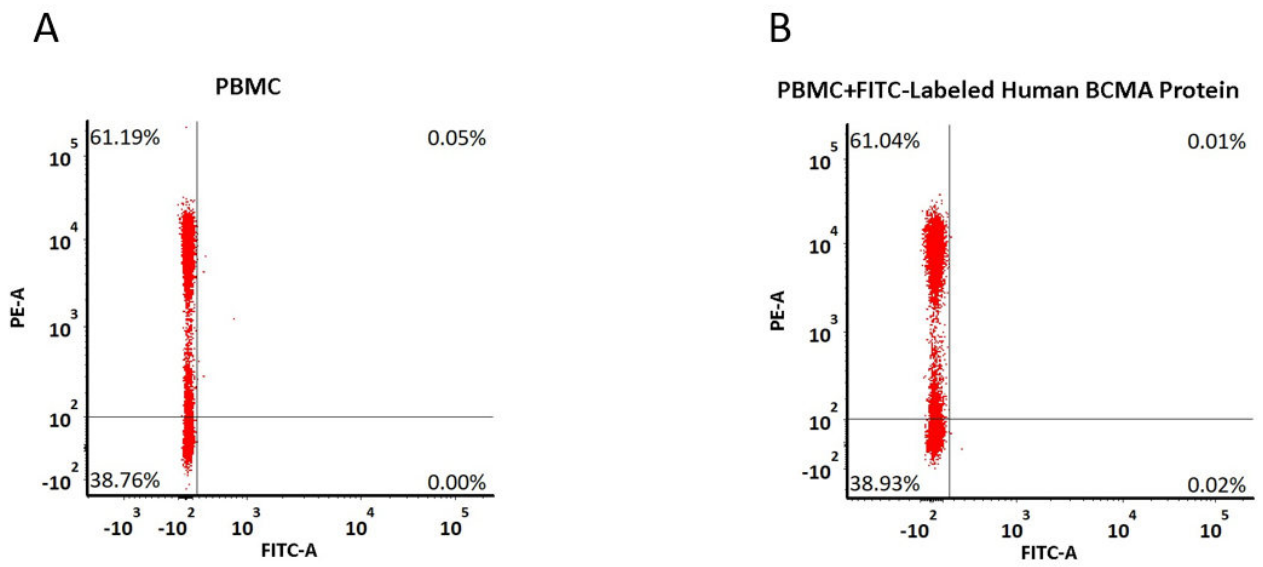
Evaluation of CAR expression

FACS Analysis of Anti-BCMA CAR Expression



2e5 of 293 CAR cells transfected with anti-BCMA-scFv were stained with 100 μL of 1 μg/mL of FITC-Labeled Human BCMA, His Tag (Cat. No. BCA-HF2H3) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A), FITC signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with FITC-Labeled Human BCMA, His Tag (Cat. No. BCA-HF2H3) and anti-CD3 antibody, washed and then analyzed with FACS. PE signal was used to evaluate the expression of CD3+ T cells in PBMCs, and FITC signal was used to evaluate the non-specific binding activity to PBMCs (QC tested).

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.