APC-Labeled Human CD7 Protein, His TagStar Staining

Catalog # CD7-HA2H6

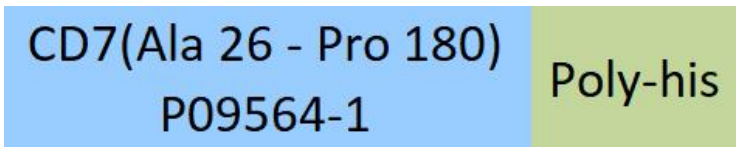
Synonym

CD7,GP40,TP41,LEU-9,Tp40

Source

APC-Labeled Human CD7 Protein, His Tag (CD7-HA2H6) is produced via conjugation of APC to Human CD7 Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human CD7 Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Pro 180 (Accession # P09564-1).
Predicted N-terminus: Ala 26

Molecular Characterization



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

The protein has a calculated MW of 31.0 kDa.

Conjugate

APC

Excitation Wavelength: 640 nm

Emission Wavelength: 661 nm

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.2% BSA, 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.

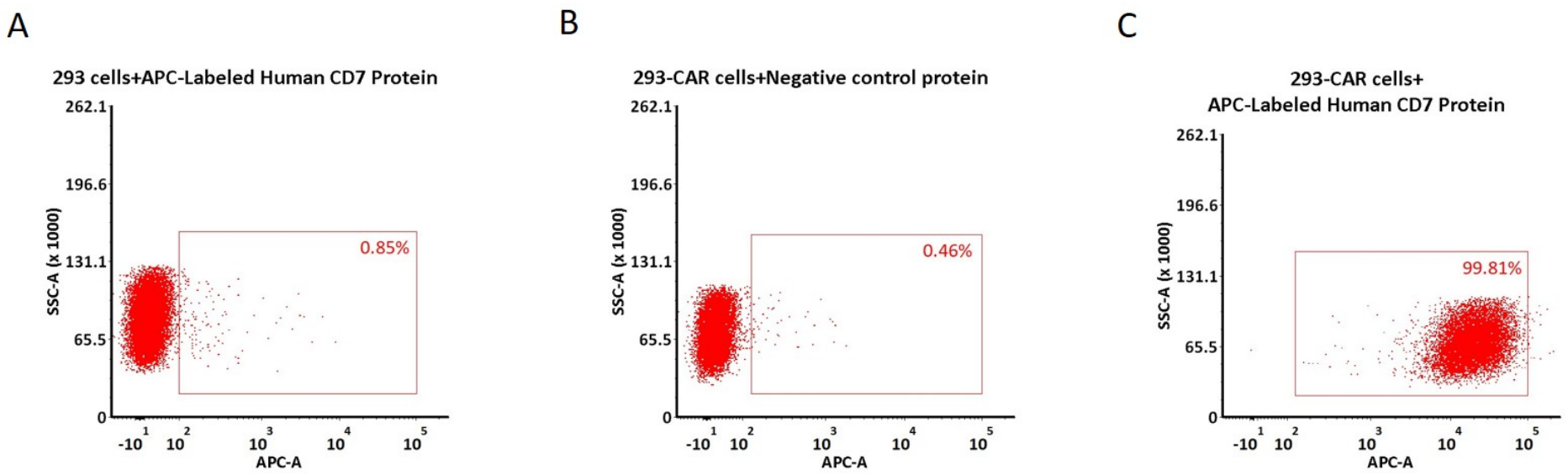
Please protect from light and avoid repeated freeze-thaw cycles.

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.

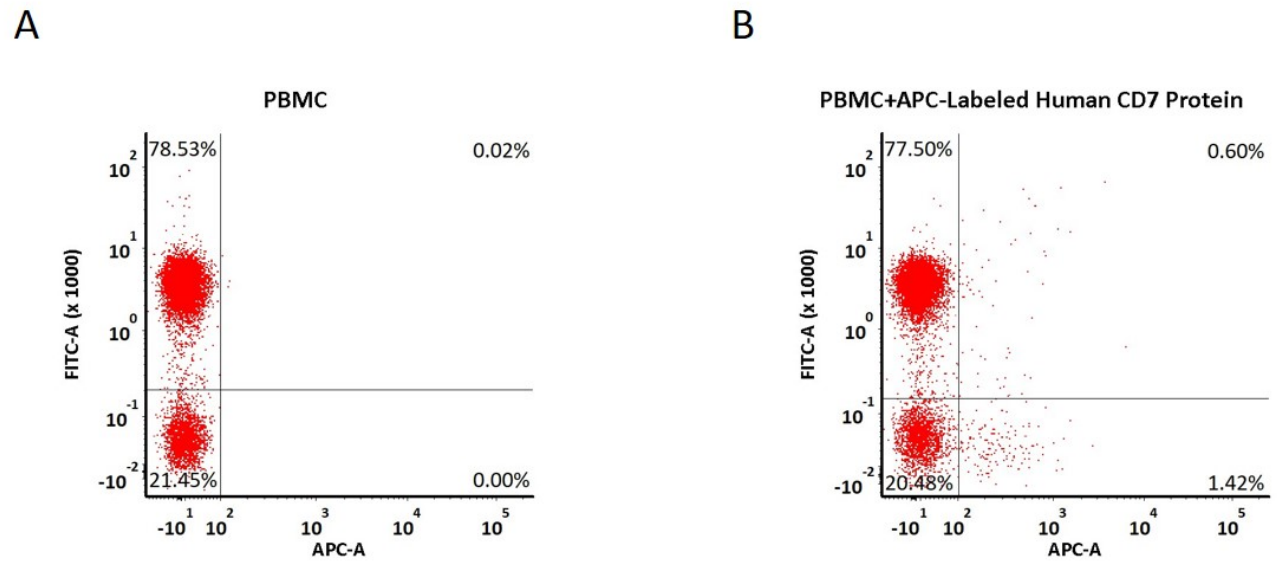
Evaluation of CAR expression

FACS Analysis of Anti-CD7 CAR Expression



5e5 of anti-CD7 CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of APC-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H6) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). APC signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with APC-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H6) and anti-CD3 antibody, washed and then analyzed with FACS. FITC signal was used to evaluate the expression of CD3+ T cells in PBMCs, and APC signal was used to evaluate the non-specific binding activity to PBMCs (QC tested).

Background

T-cell antigen CD7 (CD7) is also known as GP40, LEU-9, TP41 and Tp40. CD7 is a protein that in humans is encoded by the CD7 gene, this gene encodes a transmembrane protein which is a member of the immunoglobulin superfamily. CD7 has been shown to interact with PIK3R1. This protein is found on thymocytes and mature T cells. It plays an essential role in T-cell interactions and also in T-cell/B-cell interaction during early lymphoid development.