

Synonym

CD7,GP40,TP41,LEU-9,TP40

Source

PE-Labeled Human CD7 Protein, His Tag (CD7-HP2H6) is produced via conjugation of PE 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

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Endotoxin

Less than 1.0 EU per μg by the LAL method.

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.

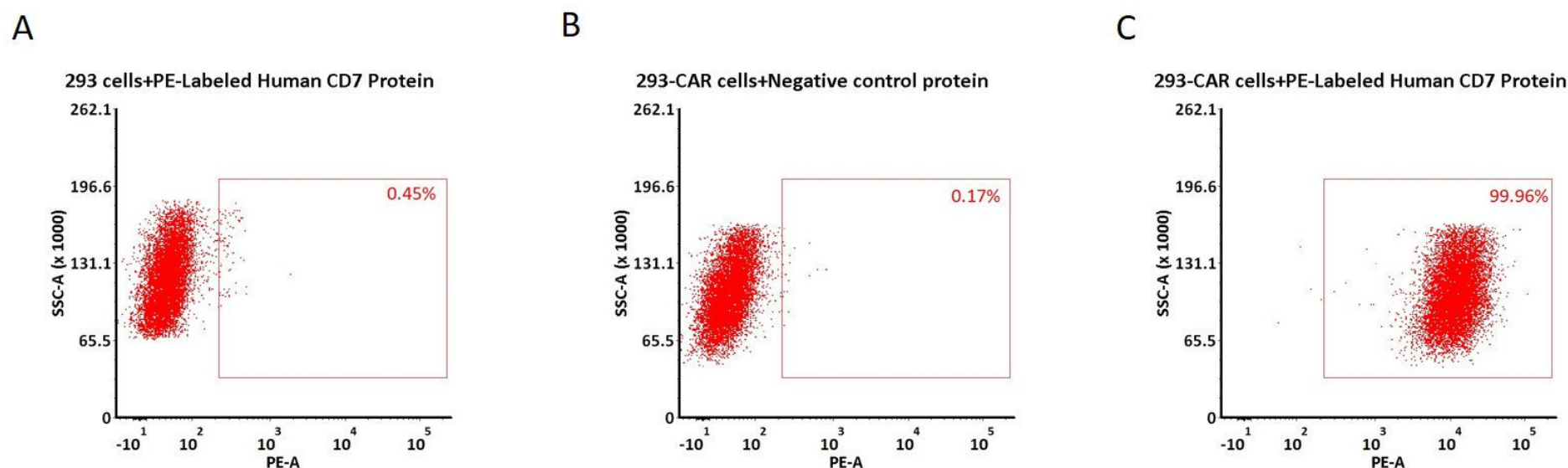
Please protect from light and avoid repeated freeze-thaw cycles.

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

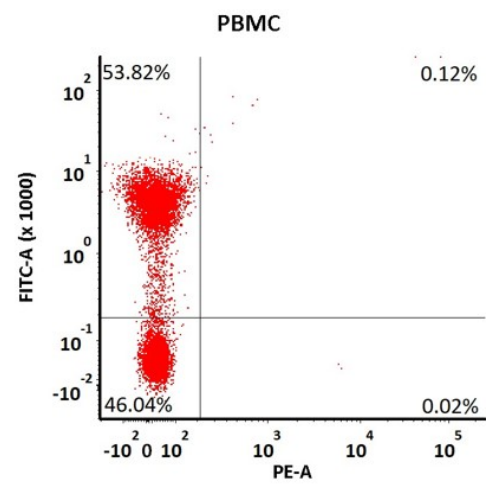
FACS Analysis of Anti-Glypican 3 CAR Expression



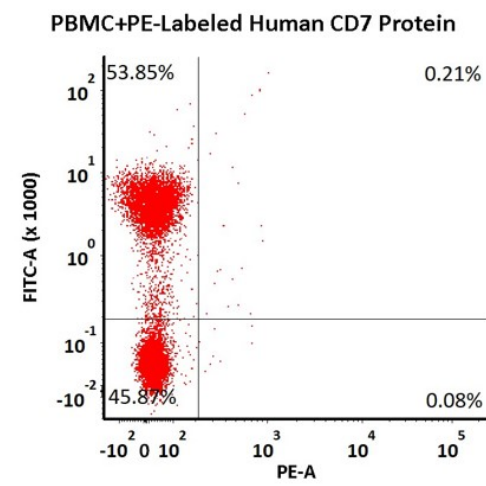
5×10^5 of anti-CD7 CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of PE-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HP2H6) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). PE signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs

A



B



5e5 of PBMCs were stained with PE-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HP2H6) 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 PE 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.

Clinical and Translational Updates

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