FITC-Labeled Human CD7 Protein, Fc Tag

Catalog # CD7-HF258

Synonym

CD7,GP40,TP41,LEU-9,Tp40

Source

FITC-Labeled Human CD7, Fc Tag(CD7-HF258) is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Pro 180 (Accession # P09564-1). Predicted N-terminus: Ala 26

Molecular Characterization

CD7(Ala 26 - Pro 180) P09564-1	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 42.9 kDa. The protein migrates as 60-65 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is *1-3*.

Purity

>95% as determined by SDS-PAGE.

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

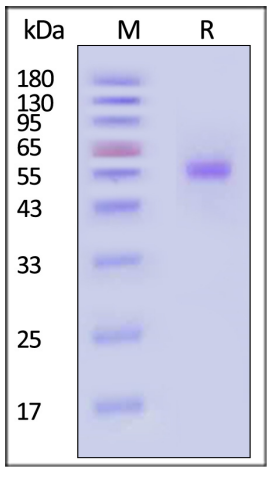
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

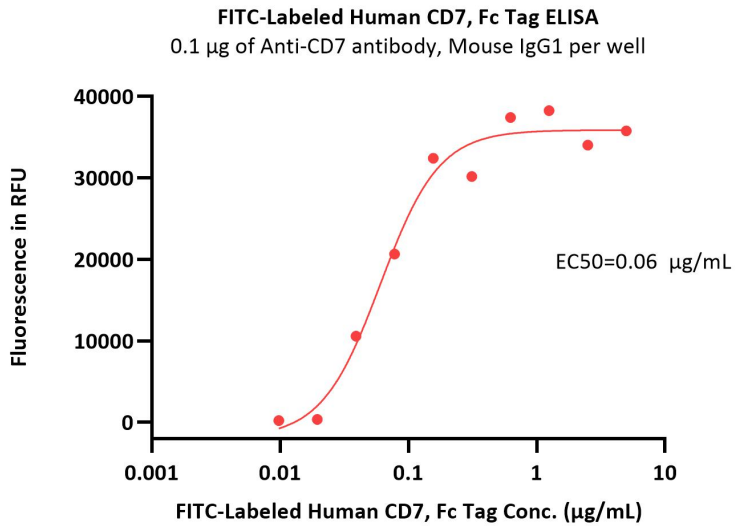
SDS-PAGE



FITC-Labeled Human CD7, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein

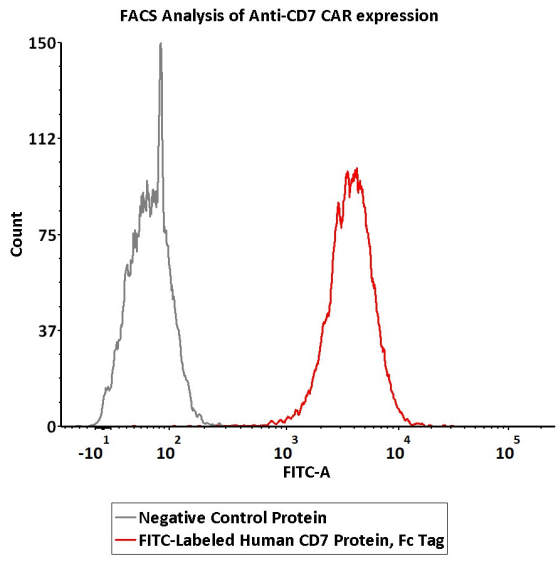
is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Anti-CD7 antibody, Mouse IgG1 at 1 μg/mL (100 μL/well) can bind FITC-Labeled Human CD7, Fc Tag (Cat. No. CD7-HF258) with a linear range of 0.01-0.078 μg/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-CD7 CAR-293 cells were stained with 100 μL of 3 μg/mL of FITC-Labeled Human CD7, Fc Tag (Cat. No. CD7-HF258) and negative control protein respectively, FITC signals was used to evaluate the binding activity (Routinely 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.