

**Synonym**

CD7,GP40,TP41,LEU-9,TP40

**Source**

FITC-Labeled Human CD7, His Tag (CD7-HF2H6) is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Pro 180 (Accession # [P09564-1](#)). It is the FITC labeled form of Human CD7, His Tag (CD7-H52H7).

Predicted N-terminus: Ala 26

**Molecular Characterization**

CD7(Ala 26 - Pro 180)  
P09564-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 18.3 kDa. The protein migrates as 25-35 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

**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.*

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;90% 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.*

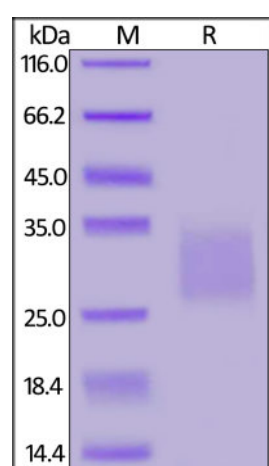
**Storage**

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

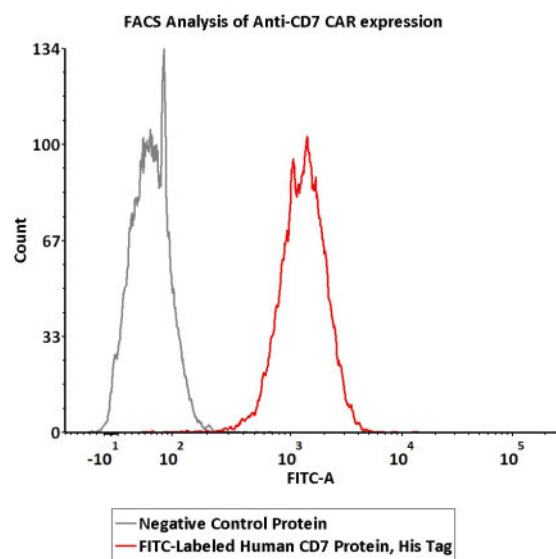
*Please protect from light and avoid repeated freeze-thaw cycles.*

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, 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%.

**Bioactivity-FACS**

2e5 of Anti-CD7 CAR-293 cells were stained with 100  $\mu$ L of 10  $\mu$ g/mL of FITC-Labeled Human CD7, His Tag (Cat. No. CD7-HF2H6) 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.

**Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.