



## Synonym

CD7,GP40,TP41,LEU-9,Tp40

## Source

Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (CD7-HA2H9) is produced via conjugation of AF488 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

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

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

## Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

## Protein Ratio

The AF488 to protein molar ratio is **0.9-1**.

## 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:

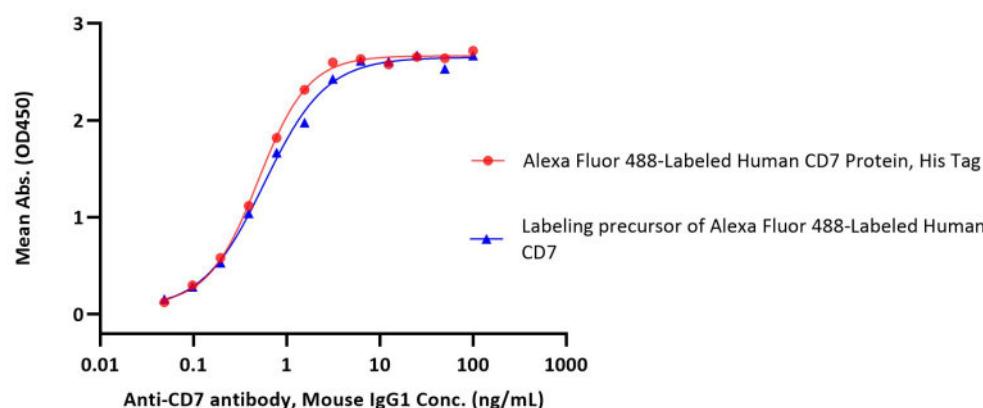
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**Star Staining** fluorescent-labeled products are developed by a new-generation site-specific labeling technology with Star Standard quality at ACROBiosystems

- ★ Using new-generation site-specific labeling technology      ★ High specificity and sensitivity verified by flow cytometry to maintain natural bioactivity.
- ★ No non-specific binding to non-transduced PBMCs.      ★ High homogeneity and high batch-to-batch consistency.

## Bioactivity-ELISA

Alexa Fluor 488-Labeled Human CD7 Protein, His Tag ELISA  
0.1 µg of Alexa Fluor 488-Labeled Human CD7 Protein, His Tag per well



Immobilized Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H9) at 1 µg/mL (100 µL/well) can bind Anti-CD7 antibody, Mouse IgG1 with a linear range of 0.05-2 ng/mL (Routinely tested). Labeling with fluorescent dyes did not affect their activity.

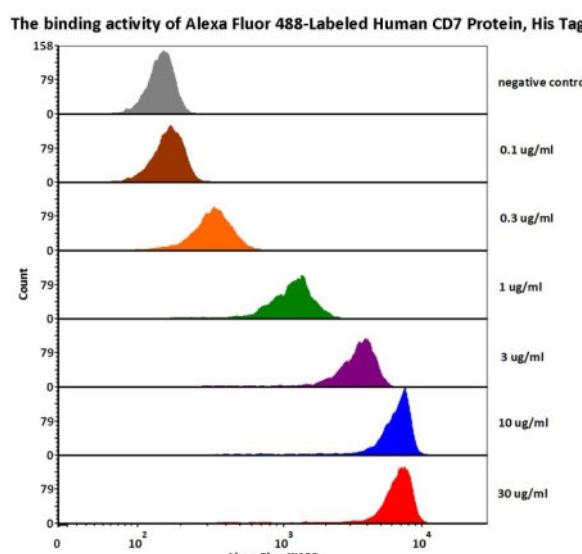
Discounts, Gifts,  
and more!



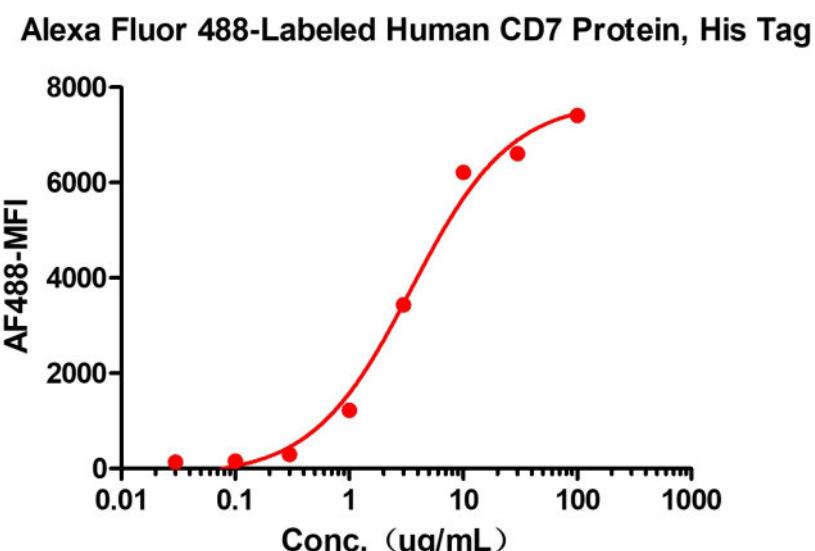
» [www.acrobiosystems.com](http://www.acrobiosystems.com)



## Bioactivity-FACS

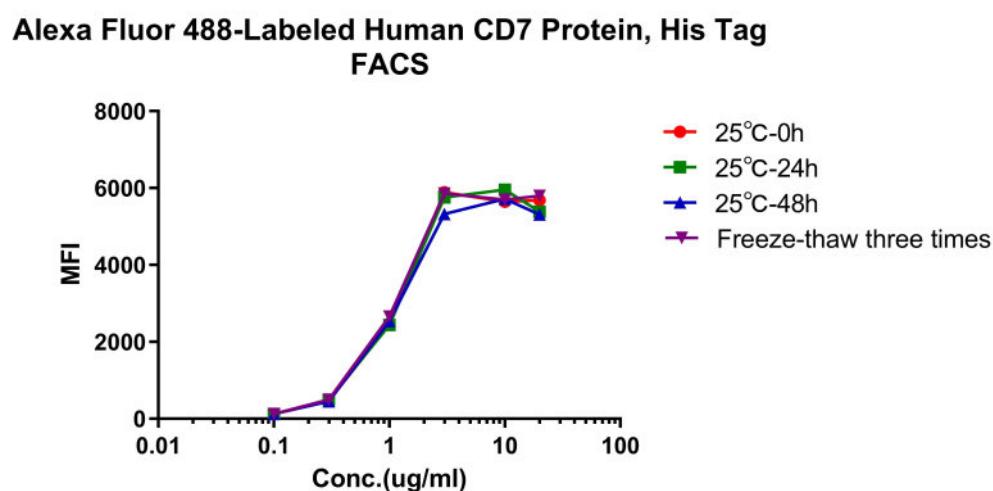


1e5 of Mouse Anti-CD7 antibody coupled beads (5.5  $\mu$ m) were stained with different concentration of Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H9) and negative control protein respectively, AF488 signal was used to evaluate the binding activity (QC tested).

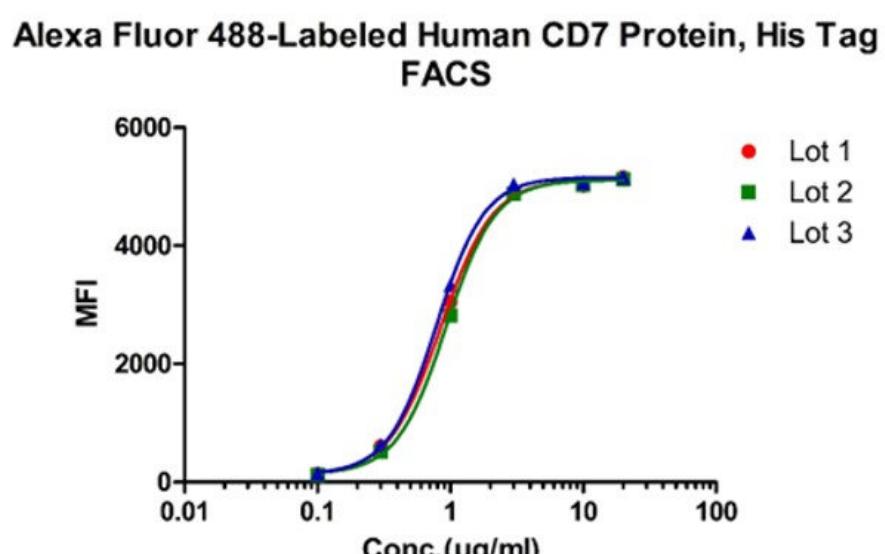


1e5 of Mouse Anti-CD7 antibody coupled beads (5.5  $\mu$ m) were stained with different concentration of Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H9) and negative control protein respectively, AF488 signal was used to evaluate the binding activity (QC tested).

## Bioactivity-Stability



Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H9) is stable at 25°C for 48 hours, equivalent to store at -70°C for 2 years and freezing and thawing 3 times without performance reduction.



Binding activity of three different lots of Alexa Fluor 488-Labeled Human CD7 Protein, His Tag against Anti-CD7 CAR-293 cells was evaluated by flow cytometry. The result shows very high batch-to-batch consistency.

## 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.

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and more!

