# Alexa Fluor™ 488-Labeled Human CD7 Protein, His TagStar Staining

Catalog # CD7-HA2H9



## **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).

Poly-his

Predicted N-terminus: Ala 26

## **Molecular Characterization**

CD7(Ala 26 - Pro 180) P09564-1

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

The protein has a calculated MW of 33.3 kDa.

### Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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.

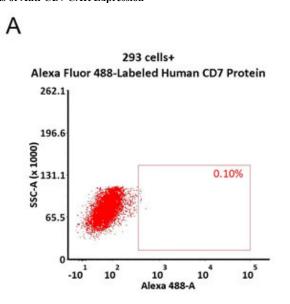
Please protect from light and avoid repeated freeze-thaw cycles.

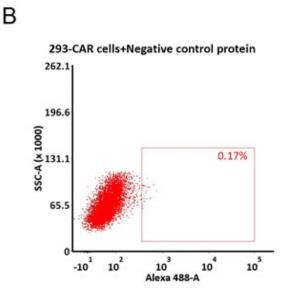
This product is stable after storage at:

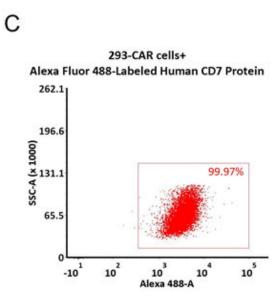
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **Evaluation of CAR expression**

FACS Analysis of Anti-CD7 CAR Expression







5e5 of anti-CD7 CAR-293 cells were stained with 100 μL of 3 μg/mL of Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H9) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). Alexa Fluor 488 signal was used to evaluate the binding activity (QC tested).

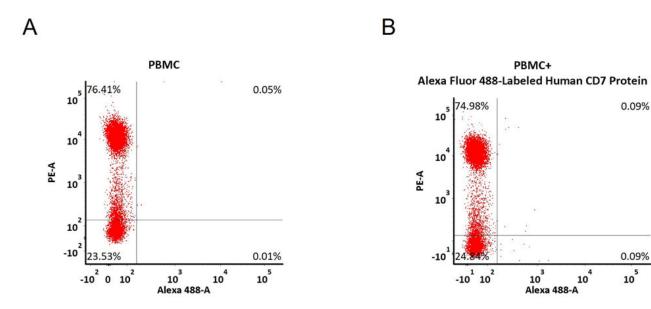
FACS Analysis of Non-specific binding to PBMCs



# Alexa Fluor™ 488-Labeled Human CD7 Protein, His TagStar Staining

Catalog # CD7-HA2H9





5e5 of PBMCs were stained with Alexa Fluor 488-Labeled Human CD7 Protein, His Tag (Cat. No. CD7-HA2H9) and anti-CD3 antibody, washed and then analyzed with FACS. PE signal was used to evaluate the expression of CD3+ T cells in PBMCs, and Alexa Fluor 488 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

