# Alexa Fluor™ 488-Labeled Human CD5 Protein, His TagStar Staining

Catalog # CD5-HA2H6

## Synonym

CD5,LEU1

## Source

Alexa Fluor 488-Labeled Human CD5 Protein, His Tag (CD5-HA2H6) is produced via conjugation of AF488 to Human CD5 Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human CD5 Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Pro 372 (Accession # P06127-1).
Predicted N-terminus: Arg 25

## Molecular Characterization

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

The protein has a calculated MW of 53.2 kDa.

## Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

## Protein Ratio

The AF488 to protein molar ratio is ***0.75-1***.

## Purity

>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

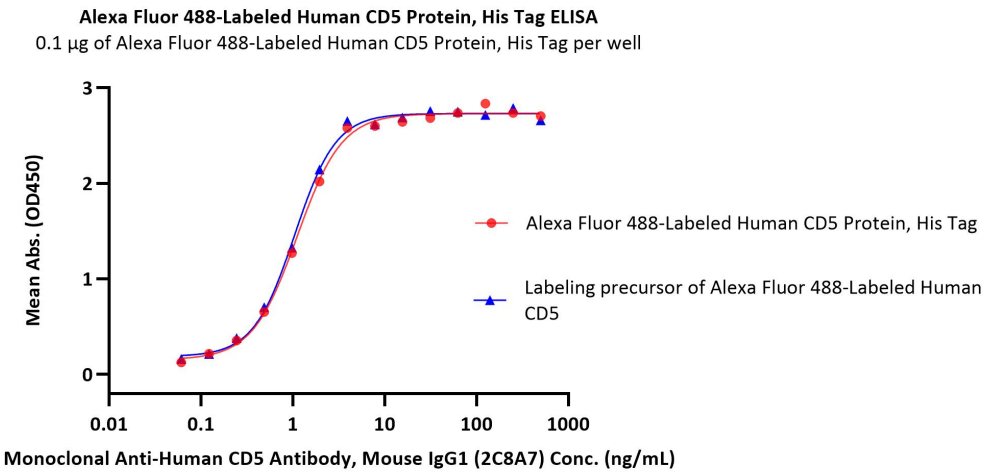
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

This product is stable after storage at:

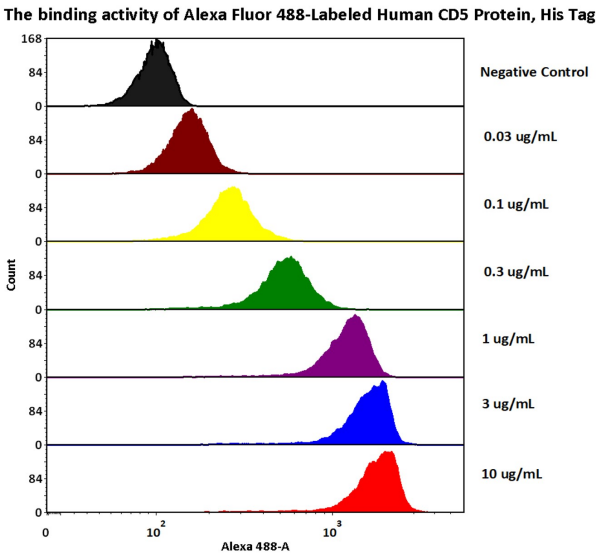
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.


## Bioactivity-ELISA

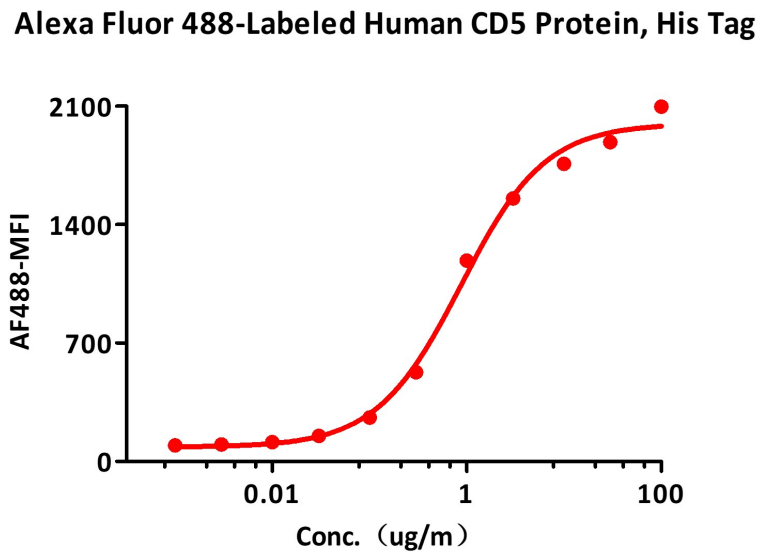


Immobilized Alexa Fluor 488-Labeled Human CD5 Protein, His Tag (Cat. No. CD5-HA2H6) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-Human CD5 Antibody, Mouse IgG1 (2C8A7) with a linear range of 0.06-2 ng/mL (Routinely tested). Labeling with fluorescent dyes did not affect their activity.

## Bioactivity-FACS




1e5 of Mouse Anti-CD5 antibody coupled beads (5.5 μm) were stained with different concentration of Alexa Fluor 488-Labeled Human CD5 Protein, His Tag (Cat. No. CD5-HA2H6) and negative control protein respectively, AF488 signal was used to evaluate the binding activity (QC tested).

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## Background

CD5 protein is a type-I transmembrane glycoprotein found on the surface of thymocytes, T lymphocytes, and a subset of B lymphocytes. It serves to mitigate activating signals from the BCR, allowing B-1 cells to be activated only by strong stimuli. Additionally, CD5 is involved in regulating lipid synthesis and inflammatory responses.