Alexa Fluor™ 488-Labeled Human CD4 Protein, His TagStar Staining

Catalog # CD4-HA2H7

Synonym

CD4,CD4mut,LEU3

Source

Alexa Fluor 488-Labeled Human CD4 Protein, His Tag (CD4-HA2H7) is produced via conjugation of AF488 to Human CD4 Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human CD4 Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Lys 26 - Pro 396 (Accession # AAH25782).
Predicted N-terminus: Lys 26

Molecular Characterization

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

The protein has a calculated MW of 55.8 kDa.

Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

Protein Ratio

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

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

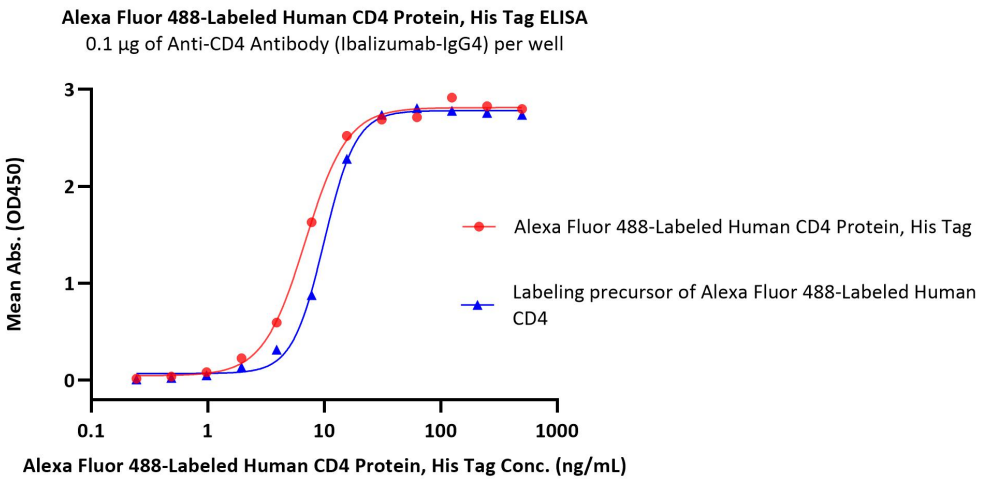
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

This product is stable after storage at:

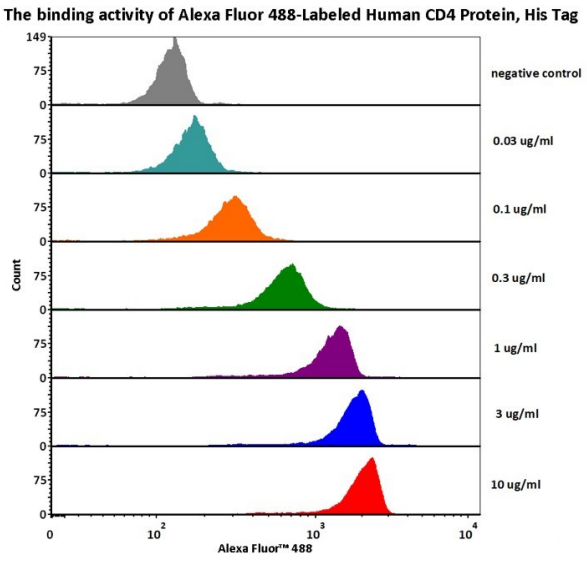
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

Bioactivity-ELISA

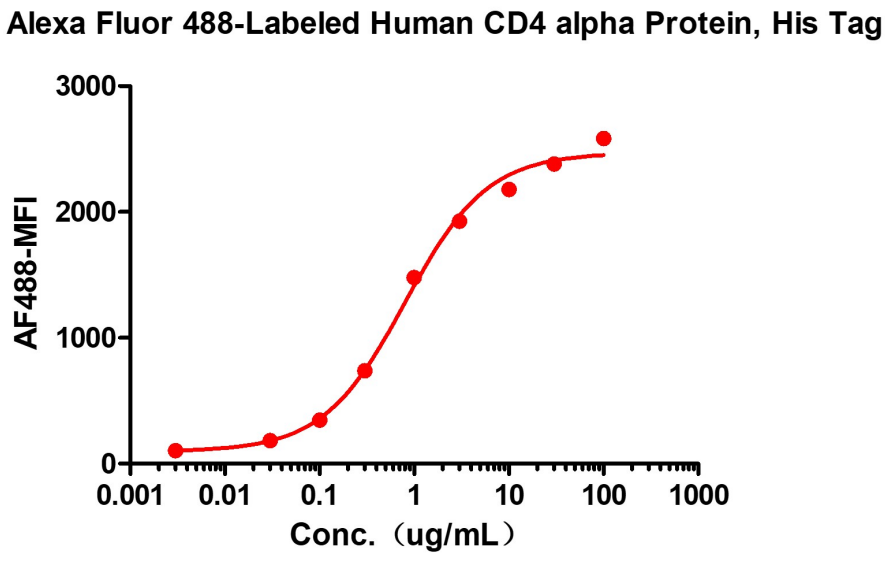


Immobilized Anti-CD4 Antibody (Ibalizumab-IgG4) at 1 μg/mL (100 μL/well) can bind Alexa Fluor 488-Labeled Human CD4 Protein, His Tag (Cat. No. CD4-HA2H7) with a linear range of 0.2-16 ng/mL (Routinely tested). Labeling with fluorescent dyes did not affect their activity.

Bioactivity-FACS



1e5 of Mouse Anti-CD4 antibody coupled beads (5.5 μm) were stained with different concentration of Alexa Fluor 488-Labeled Human CD4 Protein, His Tag (Cat. No. CD4-HA2H7) and negative control protein respectively, AF488 signal was used to evaluate the binding activity (QC tested).



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Background

CD4 is a glycoprotein that serves as an essential co-receptor on the surface of T lymphocytes (T cells), particularly helper T cells. It plays a critical role in the immune system by recognizing and binding to major histocompatibility complex (MHC) class II molecules on antigen-presenting cells (APCs), thereby facilitating T cell activation and immune response.