Alexa Fluor™ 488-Labeled Human CD8 alpha Protein, His TagStar Staining

Catalog # CDA-HA2H4

Synonym

CD8A,CD8,Leu2,MAL,p32

Source

Alexa Fluor 488-Labeled Human CD8 alpha Protein, His Tag (CDA-HA2H4) is produced via conjugation of AF488 to Human CD8 alpha Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human CD8 alpha Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Asp 182 (Accession # P01732-1).
Predicted N-terminus: Ser 22

Molecular Characterization

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

The protein has a calculated MW of 21.5 kDa | 15.5 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

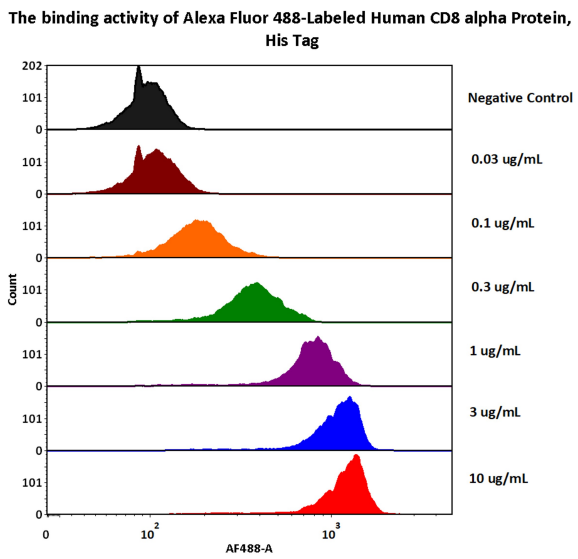
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

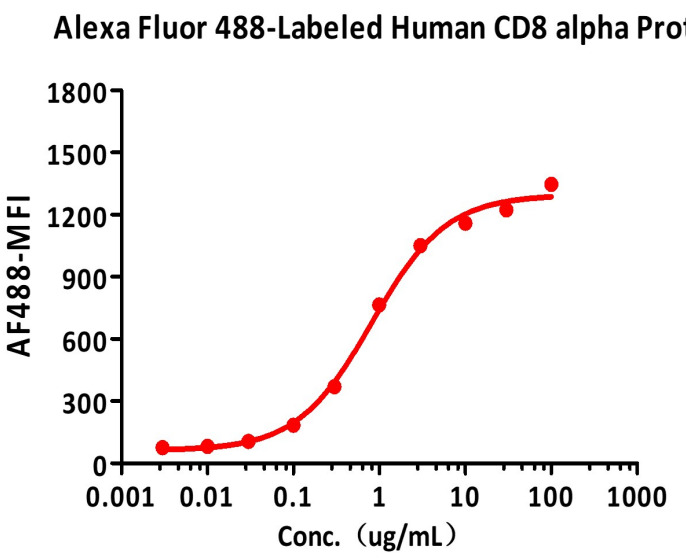
Please protect from light and avoid repeated freeze-thaw cycles.

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-FACS





1e5 of Mouse Anti-CD8 antibody coupled beads (5.5 μm) were stained with different concentration of Alexa Fluor 488-Labeled Human CD8 alpha Protein, His Tag (Cat. No. CDA-HA2H4) and negative control protein respectively, AF488 signal was used to evaluate the binding activity (QC tested).

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Background

Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells.