

# Biotinylated Human CD8 alpha&beta (CD8A&CD8B) Heterodimer Protein, His,Avitag™ &Tag Free (MALS verified)

Catalog # CDA-H82W7



## Synonym

CD8 alpha & beta, CD8A & CD8B

## Source

Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free(CDA-H82W7) is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Asp 182 (CD8A) & Leu 22 - Pro 170 (CD8B) (Accession # [P01732-1](#) (CD8A) & [P10966-1](#) (CD8B) ).

Predicted N-terminus: Ser 22 (CD8A) & Leu 22 (CD8B)

## Molecular Characterization

CD8A (Ser 22 - Asp 182) P01732-1	Acidic Tail	Poly-his	Avi
CD8B (Leu 22 - Pro 170) P10966-1	Basic Tail		

Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free, produced by co-expression of CD8 alpha and CD8 beta, has a calculated MW of 26.0 kDa (CD8 alpha) and 22.1 kDa (CD8 beta). Subunit CD8 alpha is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and an Avi tag (Avitag™) and subunit CD8 beta contains no tag but a basic tail at the C-terminus. The protein migrates as 33 kDa and 35 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

## Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

## Endotoxin

Less than 0.1 EU per µg by the LAL method.

## Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## 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

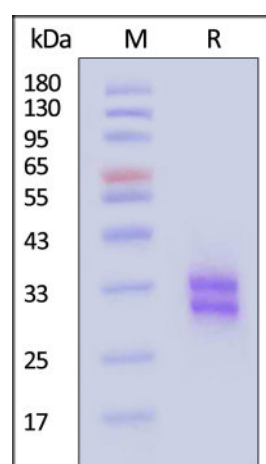
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

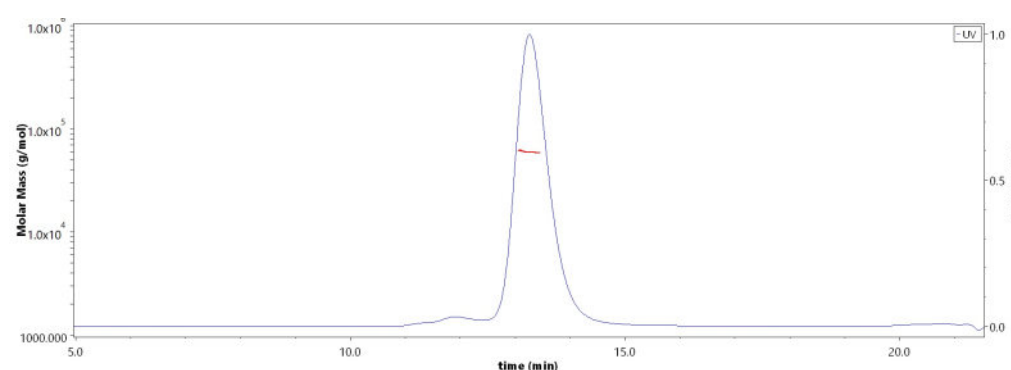
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with

## SEC-MALS



The purity of Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free (Cat. No. CDA-H82W7) is more than 90% and the

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and more!



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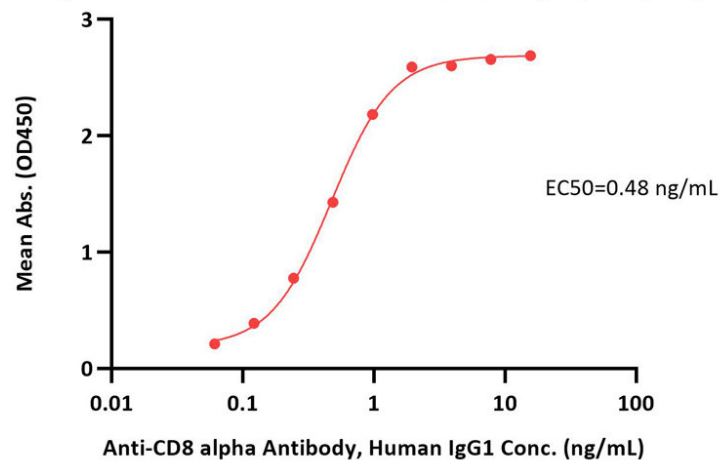


Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

molecular weight of this protein is around 50-65 kDa verified by SEC-MALS. [Report](#)

## Bioactivity-ELISA

**Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free ELISA**  
0.1 µg of Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free per well



Immobilized Biotinylated Human CD8A&CD8B Heterodimer Protein, His,Avitag&Tag Free (Cat. No. CDA-H82W7) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-CD8 alpha Antibody, Human IgG1 with a linear range of 0.1-1 ng/mL (QC tested).

## 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. CD8A forms disulfide-linked heterodimers with CD8B at the cell surface. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells. Additionally, CD8B plays a critical role in thymic selection of CD8+ T-cells. A palmitoylation site in the cytoplasmic tail of CD8B chain contributes to partitioning of CD8 into the plasma membrane lipid rafts where signaling proteins are enriched.

## Clinical and Translational Updates

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and more!

