

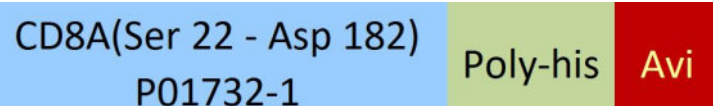
**Synonym**

CD8A,CD8,Leu2,MAL,p32

**Source**

Biotinylated Human CD8 alpha, His,Avitag (CDA-H82E3) 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, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 21.2 kDa. The protein migrates as 25-32 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Biotinylation**

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

**Biotin:Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.*

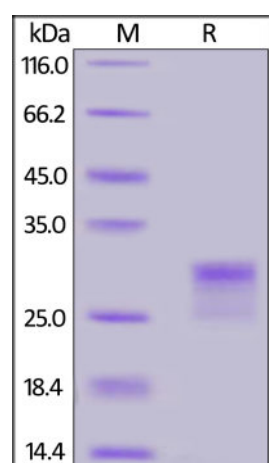
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

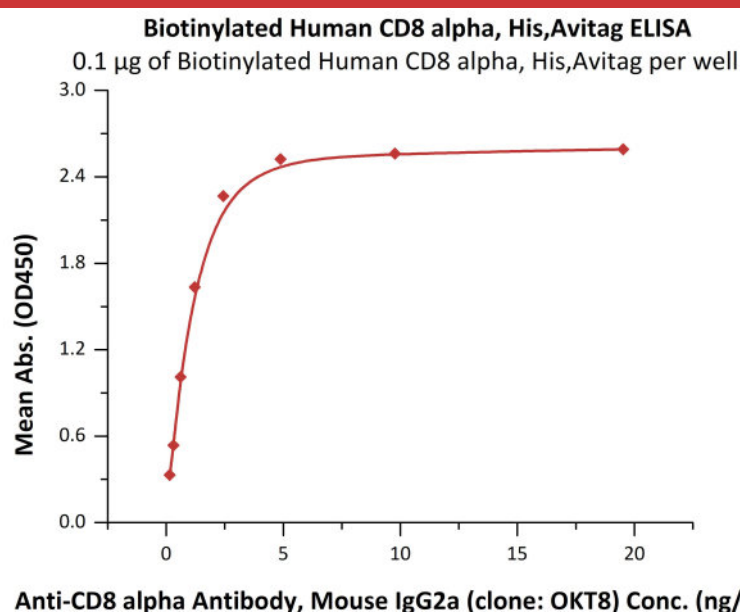
This product is stable after storage at:

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

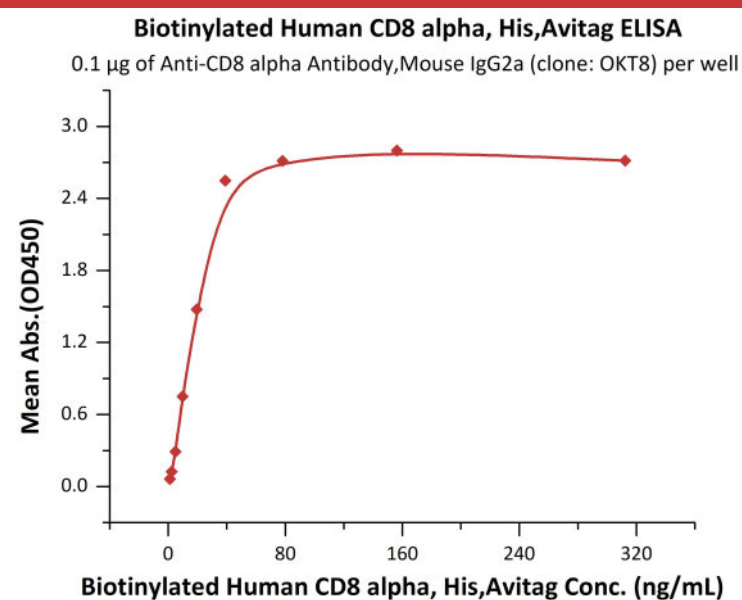
**SDS-PAGE**

Biotinylated Human CD8 alpha, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Biotinylated Human CD8 alpha, His,Avitag (Cat. No. [CDA-H82E3](#)) 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, Mouse IgG2a (clone: OKT8) with a linear range of 0.2-2 ng/mL (QC tested).



Immobilized Anti-CD8 alpha Antibody, Mouse IgG2a (clone: OKT8) at 1 µg/mL (100 µL/well) can bind Biotinylated Human CD8 alpha, His,Avitag (Cat. No. [CDA-H82E3](#)) with a linear range of 1-39 ng/mL (Routinely 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. 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.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.