

### **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**

CD8A(Ser 22 - Asp 182) P01732-1 Poly-his Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 21.2 kDa. The protein migrates as 25-32 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> 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  $\mu g$  by the LAL method / rFC method.

## **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

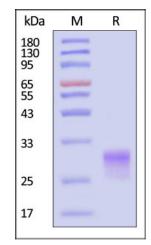
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 CD8 alpha, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

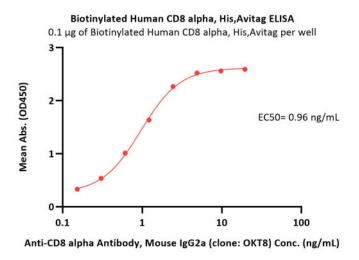
**Bioactivity-ELISA** 



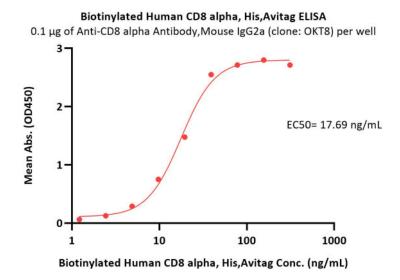
## Biotinylated Human CD8 alpha / CD8A Protein, His,Avitag™

Catalog # CDA-H82E3





Immobilized Biotinylated Human CD8 alpha, His,Avitag (Cat. No. CDA-H82E3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/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  $\mu$ g/mL (100  $\mu$ L/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.

