

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 (AvitagTM).

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.

Labeling

Biotinylation of this product is performed using AvitagTM 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.

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

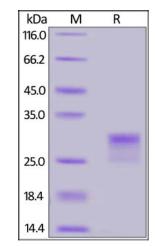
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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%.

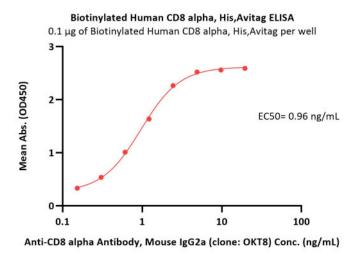
Bioactivity-ELISA



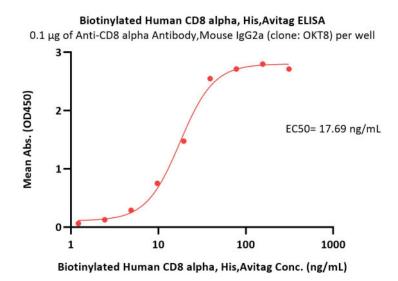
Biotinylated Human CD8 alpha / CD8A Protein, His,Avitag™

Catalog # CDA-H82E3





Immobilized Biotinylated Human CD8 alpha, His,Avitag (Cat. No. CDA-H82E3) at 1 μ g/mL (100 μ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μ g/well) plate. can bind Anti-CD8 alpha Antibody, Mouse IgG2a (clone: OKT8) with a linear range of 0.2-2 μ g/mL (QC tested).



Immobilized Anti-CD8 alpha Antibody, Mouse IgG2a (clone: OKT8) at 1 μ g/mL (100 μ 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.

Clinical and Translational Updates

