Human CD8 alpha&beta (CD8A&CD8B) Heterodimer Protein, His Tag&Tag Free

Catalog # CDA-H52W5AI

Application

Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free AIDD-Ready protein is designed for direct use in SPR assays. It is supplied in a sugar-free, glycerol-free formulation to eliminate refractive index interference in SPR. No desalting or buffer exchange is required before use, simplifying the SPR workflow and supporting high-throughput experimental validation to accelerate the transition from AI prediction to wet-lab validation.

Features and Advantages

- **Directly compatible with SPR:** No desalting or buffer exchange required; supplied as a liquid to reduce sample preparation and improve experimental efficiency.
- **High batch-to-batch consistency:** Each lot is released using SPR QC to ensure experimental reproducibility.
- **Validated with representative drugs:** SPR binding activity is validated using representative drug antibodies to ensure suitability for drug screening and evaluation.

Synonyms

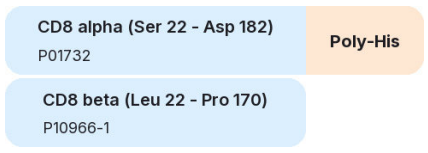
CD8 alpha & beta, CD8A & CD8B

Source

Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free (CDA-H52W5AI) is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Asp 182 & Leu 22 - Pro 170 (Accession # P01732 & P10966-1).

Predicted N-terminus: Ser 22 & Leu 22

Molecular Characterization



Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free, produced by co-expression of CD8 alpha and CD8 beta, has a calculated MW of 19.5 kDa (CD8 alpha) and 22.1 kDa (CD8 beta). Subunit CD8 alpha is fused with with a polyhistidine tag at the C-terminus and subunit CD8 beta contains no tag. The protein migrates as 28-33 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Formulated in a proprietary trehalose-free buffer, supplied ready-to-use for SPR/BLI analysis - no buffer exchange required.

For detailed formulation, please refer to the batch-specific COA.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

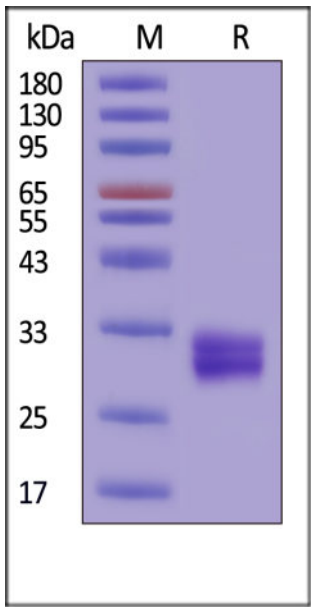
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

ACRO Quality Management System

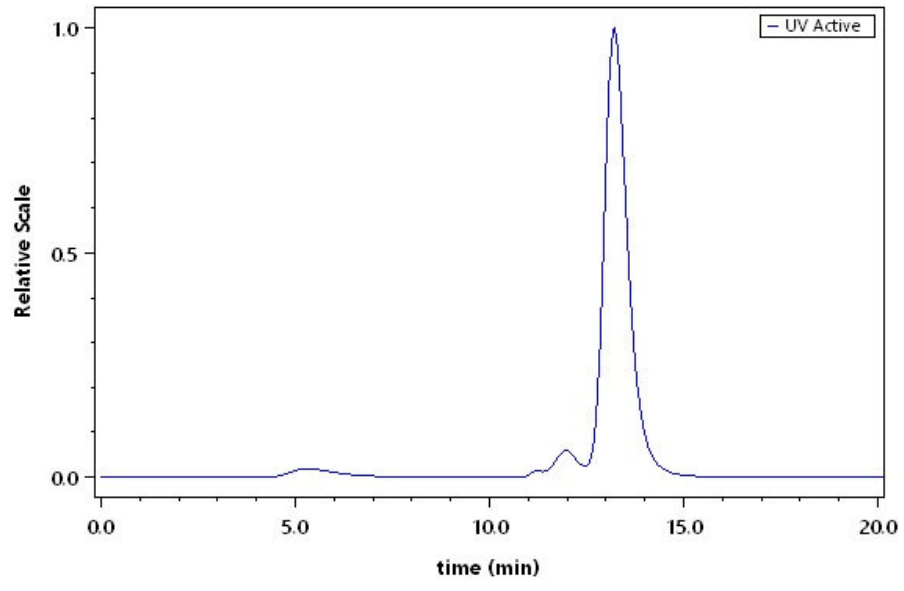
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



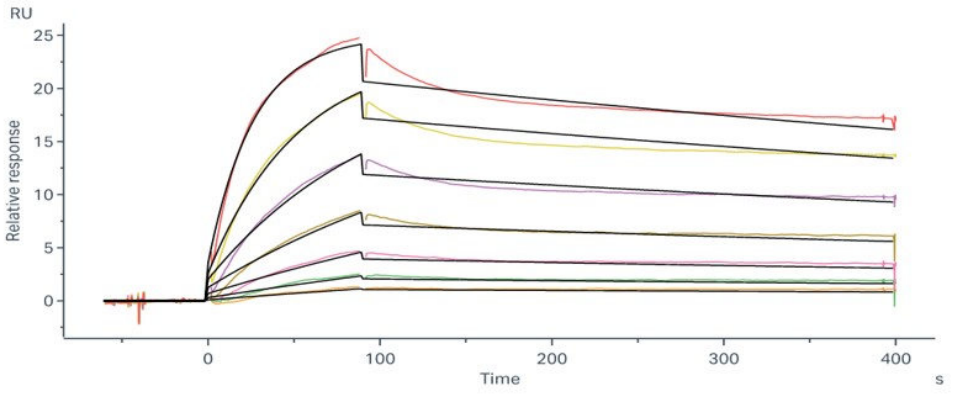
Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free (Cat. No. CDA-H52W5AI) was greater than 90% as determined by SEC-HPLC.

Activity-SPR



Anti-CD8 alpha Antibody, Human IgG1 captured on Protein A Chip can bind Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free (Cat. No. CDA-H52W5AI) with an affinity constant of 2.73 nM as determined in a SPR assay (Biacore 8K) (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.

Discounts, Gifts, and more!