Human CD40 Ligand / TNFSF5 Protein, His,Flag Tag, active trimer

Catalog # CDL-H52DbAI2

Application

Human CD40 Ligand Protein, His,Flag Tag, active trimer 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. Each tube features a unique barcode and bottom code for precise sample identification, supporting automated, high-throughput workflows and accelerating 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.
- **Unique Tube Identification:** Each tube features a unique barcode and bottom code, supporting automated and high-throughput workflows. To request the product manifest, please contact our Technical Support team or click the button below.

Synonyms

CD40LG, CD154, CD40L, HIGM1, IGM, IMD3, T-BAM, TNFSF5, TRAP, gp39

Source

Human CD40 Ligand Protein, His,Flag Tag, active trimer (CDL-H52DbAI2) is expressed from human 293 cells (HEK293). It contains AA Gly 116 - Leu 261 (Accession # P29965-1).

Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus, followed by a flag tag.

The protein has a calculated MW of 49.9 kDa. The protein migrates as 50-55 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>95% as determined by SDS-PAGE.

>95% 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.

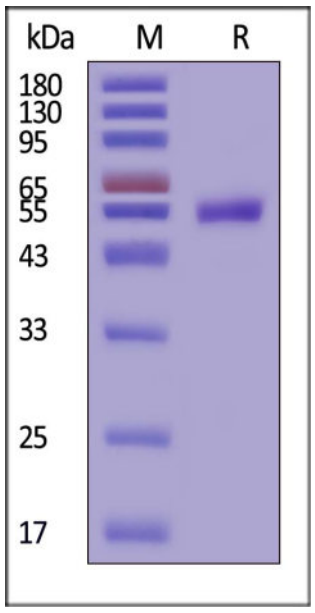
This product is stable after storage at:

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

ACRO Quality Management System

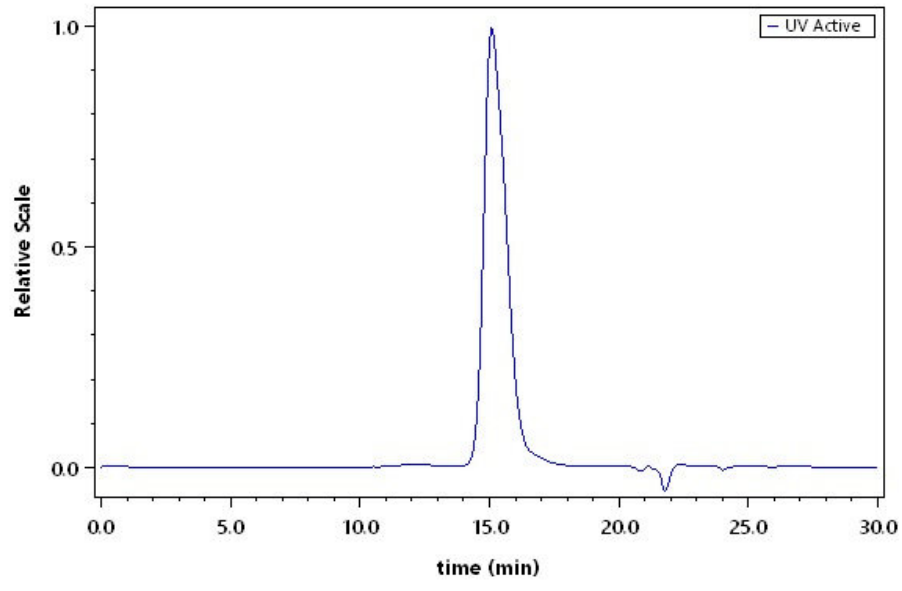
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



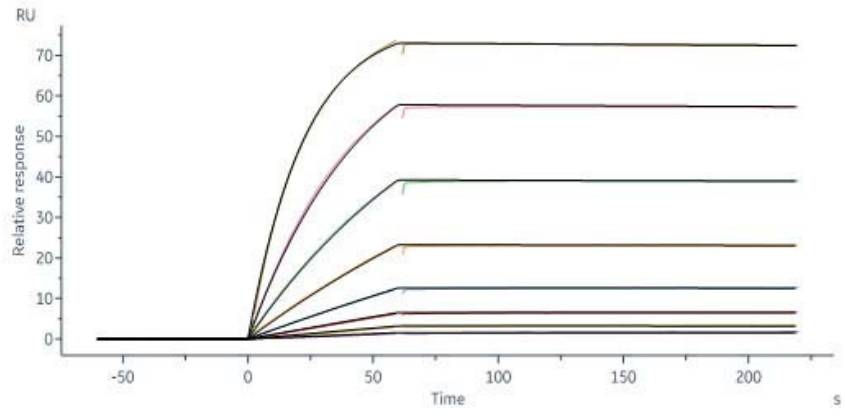
Human CD40 Ligand Protein, His,Flag Tag, active trimer on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human CD40 Ligand Protein, His,Flag Tag, active trimer (Cat. No. CDL-H52DbAI2) was greater than 95% as determined by SEC-HPLC.

Activity-SPR



Frexalimab (biosimilar) captured on Protein A Chip can bind Human CD40 Ligand Protein, His,Flag Tag (Cat. No. CDL-H52DbAI2) with an affinity constant of 28.5 pM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

The protein encoded by this gene is expressed on the surface of T cells. It regulates B cell function by engaging CD40 on the B cell surface. A defect in this gene results in an inability to undergo immunoglobulin class switch and is associated with hyper-IgM syndrome. [provided by RefSeq, Jul 2008]