Human LIGHT / TNFSF14 Protein, His Tag, active trimer

Catalog # LIT-H5242AI2

Application

Human LIGHT Protein, His 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

CD258 antigen, CD258, HVEM-L, LIGHT, LTg, TNFSF14, TR2, HVEML

Source

Human LIGHT Protein, His Tag, active trimer (LIT-H5242AI2) is expressed from human 293 cells (HEK293). It contains AA Asp 74 - Val 240 (Accession # O43557-1).

Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 58.3 kDa. The protein migrates as 50 kDa, 95-100 kDa, 150 kDa and >180 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.

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.

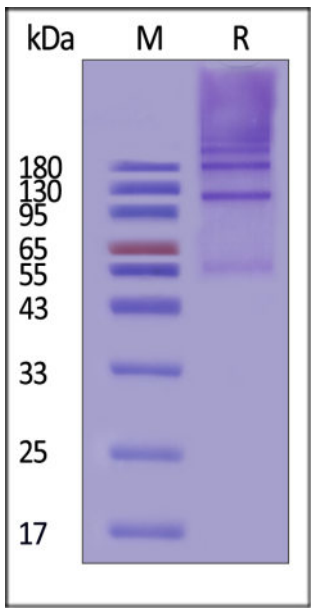
This product is stable after storage at:

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

ACRO Quality Management System

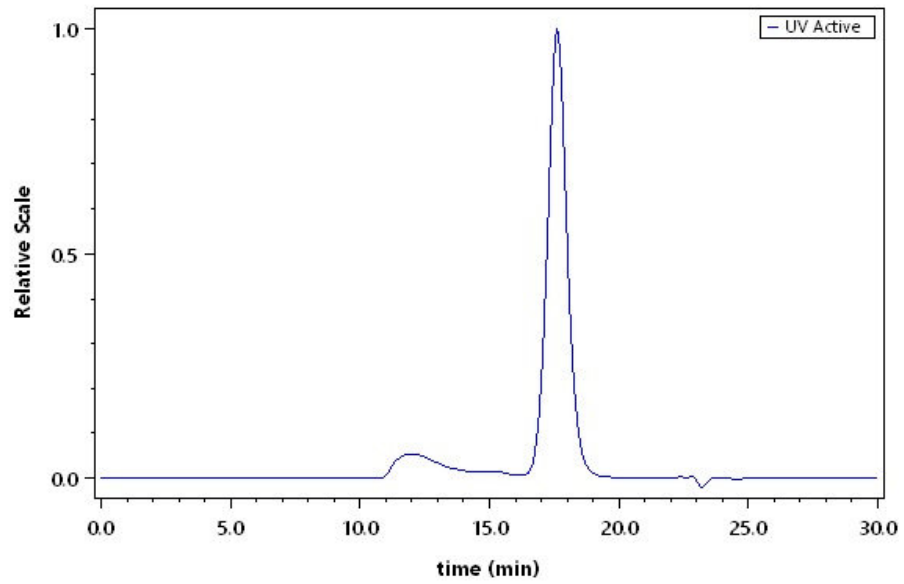
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



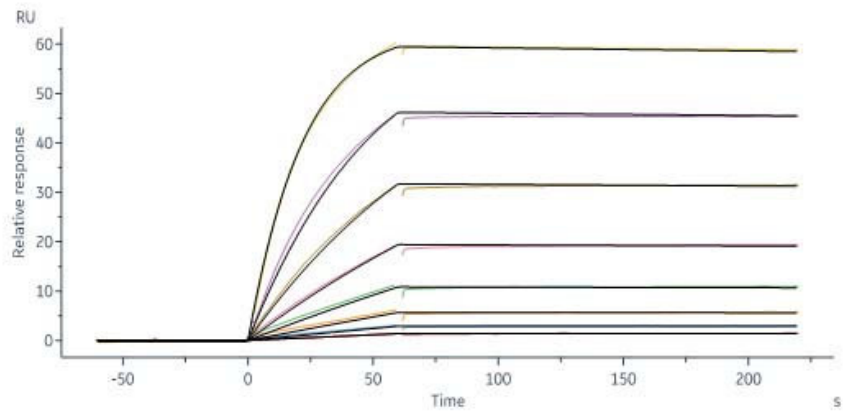
Human LIGHT Protein, His Tag, active trimer on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human LIGHT Protein, His Tag, active trimer (Cat. No. LIT-H5242AI2) was greater than 85% as determined by SEC-HPLC.

Activity-SPR



Quisovalimab (biosimilar) captured on Protein A Chip can bind Human LIGHT Protein, His Tag (Cat. No. LIT-H5242AI2) with an affinity constant of 0.206 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Tumor necrosis factor ligand superfamily member 14(LIGHT) is a tumor necrosis factor (TNF) superfamily ligand that regulates T cell immune responses by signaling through the herpes virus entry mediator (HVEM) and the lymphotoxin beta receptor (LTbetaR). LIGHT has emerged as a potent initiator of T cell co-stimulation signals effecting CTL-mediated tumor rejection, allograft rejection and graft versus host disease. Constitutive expression of LIGHT leads to tissue destruction and autoimmune-like disease syndromes.