Human IL-7 R alpha / CD127 Protein, His Tag

Catalog # IL7-H52H7AI

Application

Human IL-7 R alpha Protein, His Tag 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.

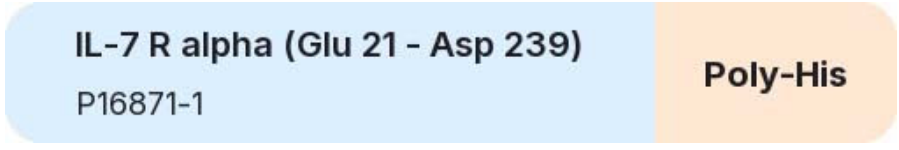
Synonyms

IL7Ra, CD127

Source

Human IL-7 R alpha Protein, His Tag (IL7-H52H7AI) is expressed from human 293 cells (HEK293). It contains AA Glu 21 - Asp 239 (Accession # P16871-1).

Molecular Characterization



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

The protein has a calculated MW of 27.3 kDa. The protein migrates as 35-45 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-MALS.

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.

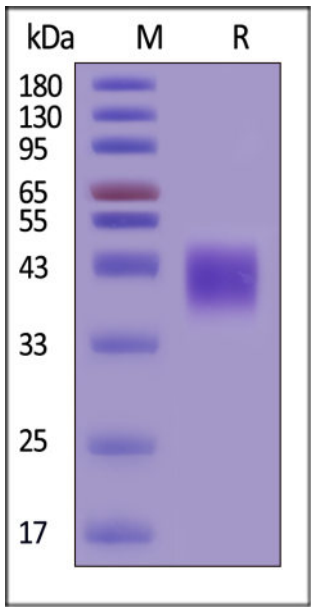
This product is stable after storage at:

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

ACRO Quality Management System

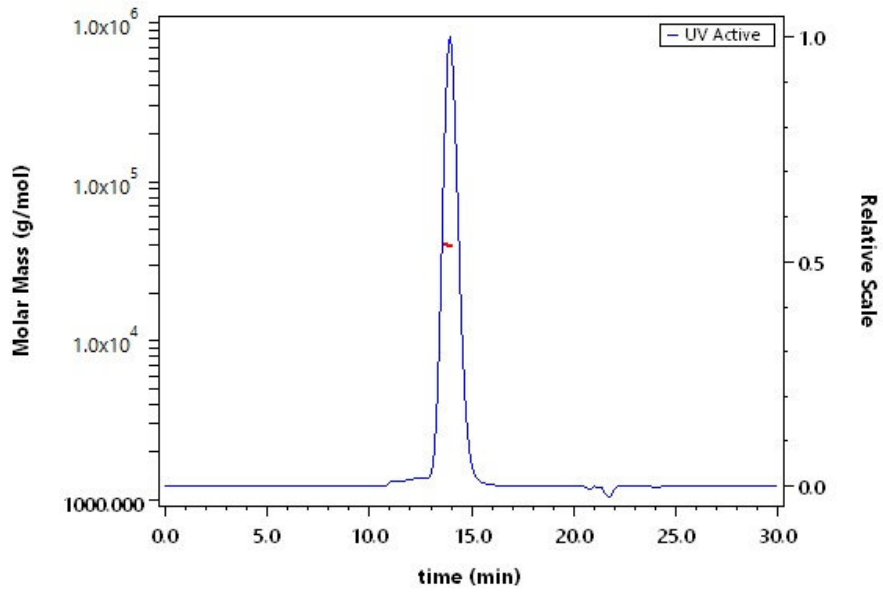
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



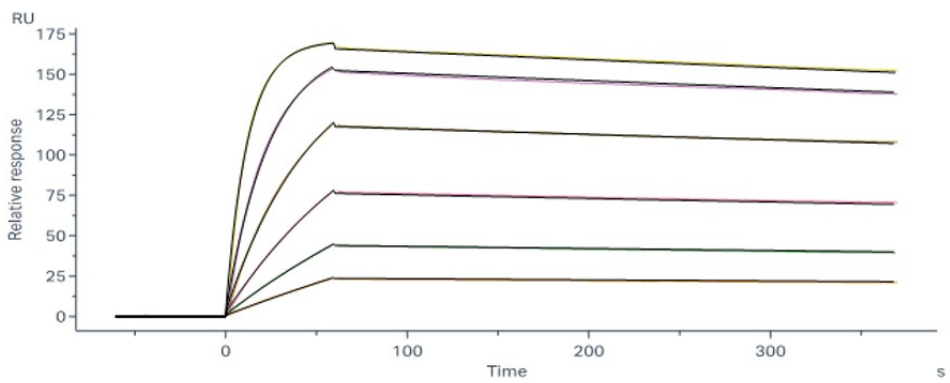
Human IL-7 R alpha Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human IL-7 R alpha Protein, His Tag (Cat. No. IL7-H52H7AI) is more than 95% and the molecular weight of this protein is around 30-45 kDa verified by SEC-MALS.

Activity-SPR



Lusvertikimab (biosimilar) captured on Protein A Chip can bind Human IL-7 R alpha Protein, His Tag (Cat. No. IL7-H52H7AI) with an affinity constant of 1.29 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin-7 receptor subunit alpha (IL7Ra) is also known as CD antigen CD127, which belongs to the type I cytokine receptor family and type 4 subfamily. IL7Ra /CD127 contains 1 fibronectin type-III domain. IL7Ra /CD127 is expressed on various cell types, including naive and memory T cells and many others. IL7Ra /CD127 is receptor for interleukin-7 and also acts as a receptor for thymic stromal lymphopoietin (TSLP). The IL7 receptor is a heterodimer of IL7R and IL2RG. The TSLP receptor is a heterodimer of CRLF2 and IL7R.