Human IL-2 R alpha / CD25 Protein, His Tag

Catalog # ILA-H52H9AI2

Application

Human IL-2 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. 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

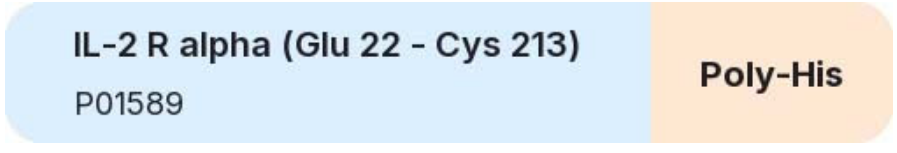
IL2RA, CD25, p55, IL2-RA, IL-2-RA

Source

Human IL-2 R alpha Protein, His Tag (ILA-H52H9AI2) is expressed from human 293 cells (HEK293). It contains AA Glu 22 - Cys 213 (Accession # P01589).

Predicted N-terminus: Glu 22

Molecular Characterization



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

The protein has a calculated MW of 23.6 kDa. The protein migrates as 33-43 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.

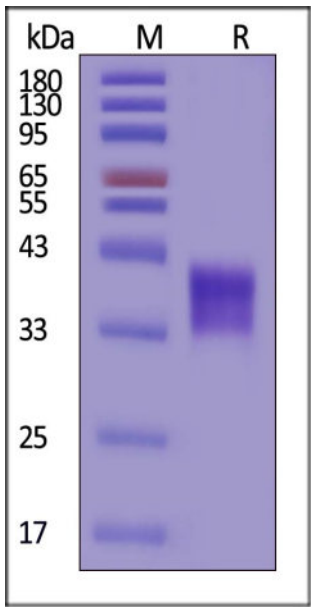
This product is stable after storage at:

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

ACRO Quality Management System

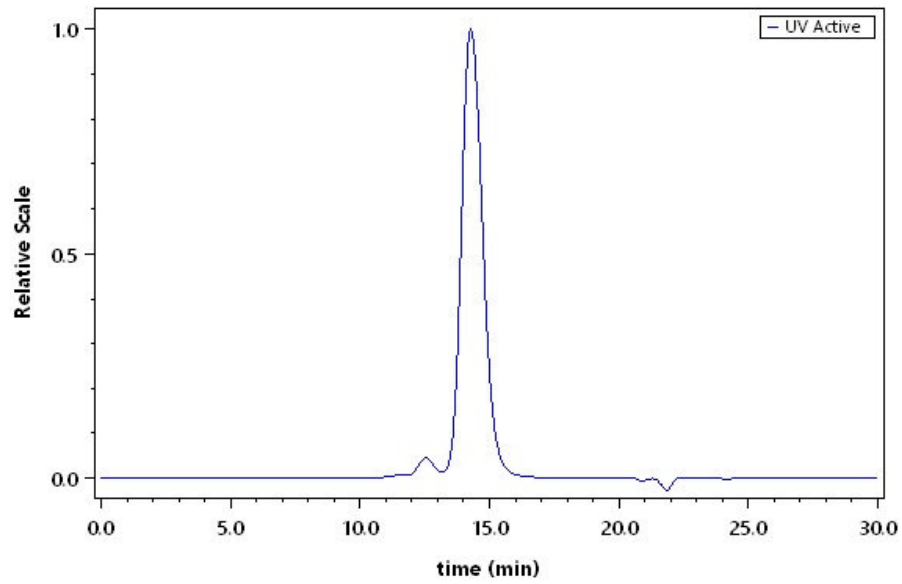
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



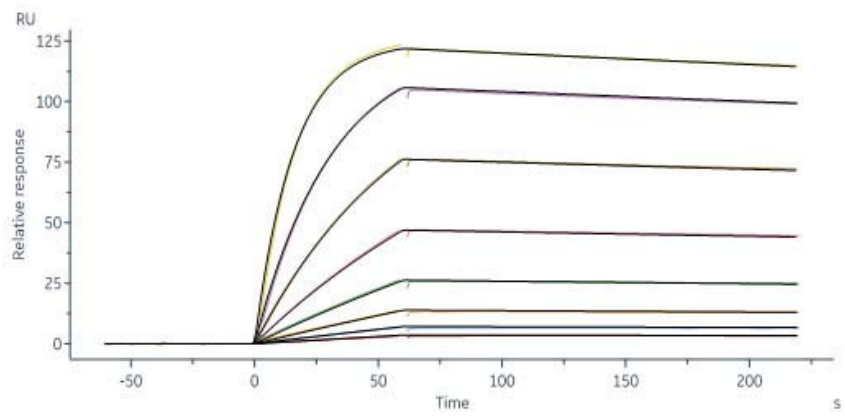
Human IL-2 R alpha Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human IL-2 R alpha Protein, His Tag (Cat. No. ILA-H52H9AI2) was greater than 90% as determined by SEC-HPLC.

Activity-SPR



Daclizumab captured on Protein A Chip can bind Human IL-2 R alpha Protein, His Tag (Cat. No. ILA-H52H9AI2) with an affinity constant of 0.624 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin-2 receptor subunit alpha (IL2RA) is also known as IL-2R subunit alpha, IL-2-RA, IL2-RA, TAC antigen, p55, CD antigen CD25, is a type I transmembrane glycoprotein. IL2RA is expressed on activated T cells and regulatory T cells, and is capable of binding IL2 with low affinity by itself. However, a ligand-induced high affinity heterotrimeric receptor complex is produced when IL2RA is associated non-covelently with the IL2 receptor beta and gamma chain, and subsequently initiates the intacellular signal pathways such as MAPK or JAK/STAT. On dendritic cells (DC), CD25 has been previously regarded as an activation marker, while both murine and human DC can express CD25, they do not express the beta-chain of the IL-2 receptor, which is indispensable for the execution of IL-2 signaling.

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