Human IL-22 R alpha 1 Superstable Mutant Protein, His Tag

Catalog # IL1-H52H7AI2

Application

Human IL-22 R alpha 1 Superstable Mutant 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.

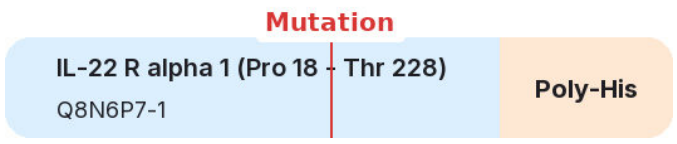
Synonyms

Interleukin-22 receptor subunit alpha-1, IL-22 receptor subunit alpha-1, IL-22R-alpha-1, IL-22RA1, Cytokine receptor class-II member 9, Cytokine receptor family 2 member 9, CRF2-9, ZcytoR11, IL22RA1 , IL22R

Source

Human IL-22 R alpha 1 Superstable Mutant Protein, His Tag (IL1-H52H7AI2) is expressed from human 293 cells (HEK293). It contains AA Pro 18 - Thr 228 (Accession # Q8N6P7-1).

Molecular Characterization



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

The protein has a calculated MW of 26.1 kDa. The protein migrates as 33 kDa and 34-38 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Within the expressed region, several mutations were introduced to optimize the protein expression and stability.

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.

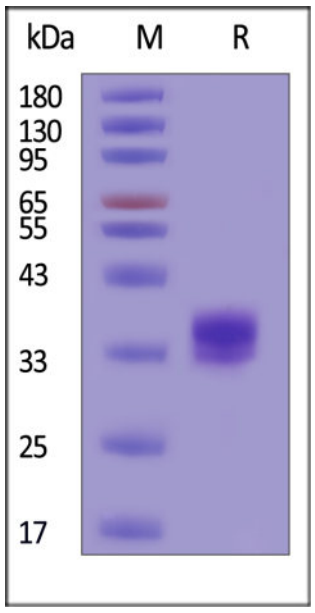
This product is stable after storage at:

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

ACRO Quality Management System

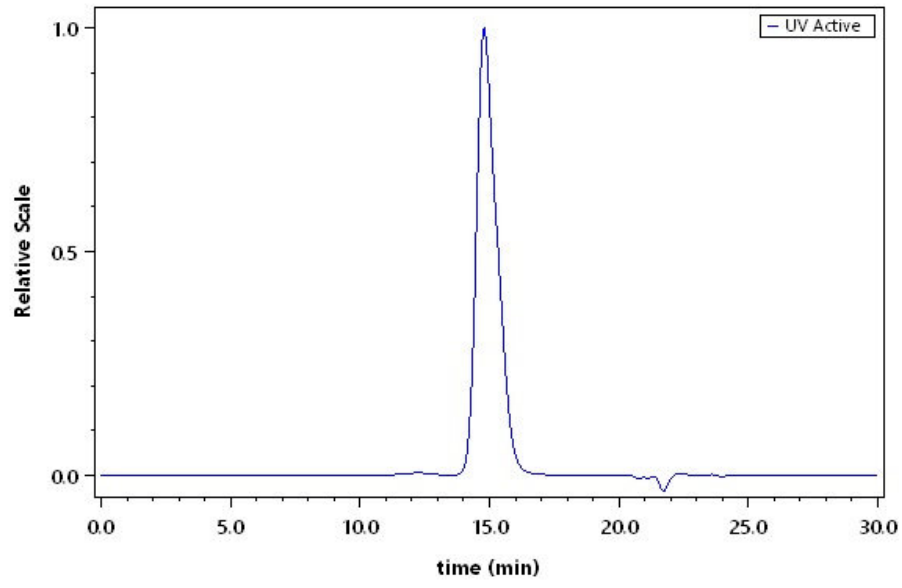
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



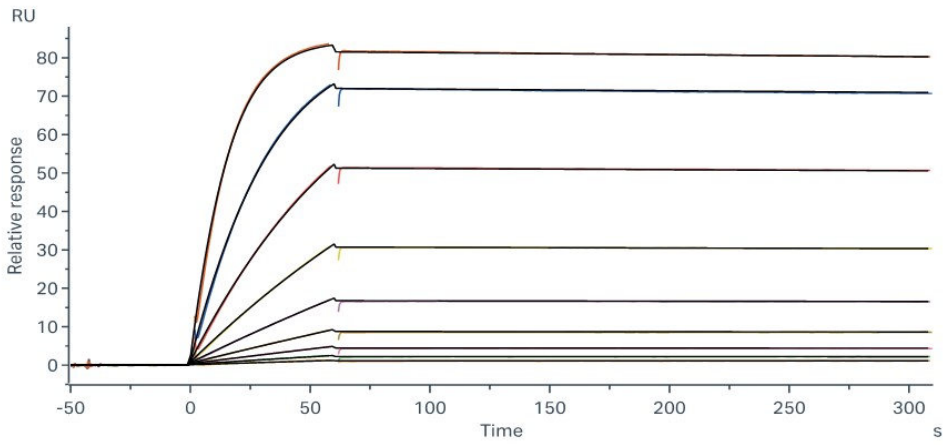
Human IL-22 R alpha 1 Superstable Mutant Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human IL-22 R alpha 1 Superstable Mutant Protein, His Tag (Cat. No. IL1-H52H7AI2) was greater than 95% as determined by SEC-HPLC.

Activity-SPR



Temtokibart (biosimilar) captured on Protein A Chip can bind Human IL-22 R alpha 1 Superstable Mutant Protein, His Tag (Cat. No. IL1-H52H7AI2) with an affinity constant of 40.4 pM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin-22 receptor subunit alpha-1(IL22RA1) is a component of the receptor for IL20, IL22 and IL24.Component of IL22 receptor formed by IL22RA1 and IL10RB enabling IL22 signaling via JAK/STAT pathways. IL22 also induces activation of MAPK1/MAPK3 and Akt kinases pathways. Component of one of the receptor for IL20 and IL24 formed by IL22RA1 and IL20RB also signaling through STATs activation. Mediates IL24 antiangiogenic activity as well as IL24 inhibitory effect on endothelial cell tube formation and differentiation.

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