Human IL-1 RAcP / IL-1 R3 Protein, His Tag

Catalog # ILP-H5225AI2

Application

Human IL-1 RAcP 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

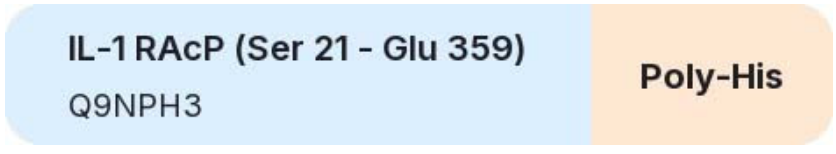
IL1RAP, IL-1RAcP, C3orf13, IL1R3

Source

Human IL-1 RAcP Protein, His Tag (ILP-H5225AI2) is expressed from human 293 cells (HEK293). It contains AA Ser 21 - Glu 359 (Accession # Q9NPH3).

Predicted N-terminus: Ser 21

Molecular Characterization



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

The protein has a calculated MW of 39.9 kDa. The protein migrates as 50-60 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.

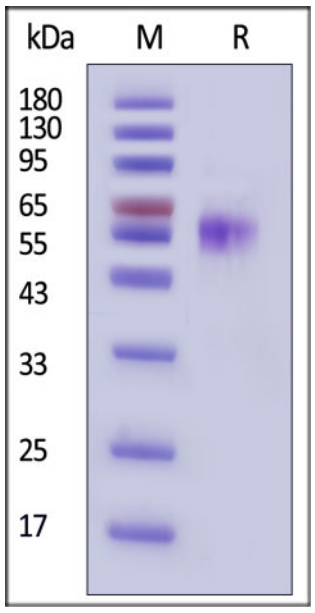
This product is stable after storage at:

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

ACRO Quality Management System

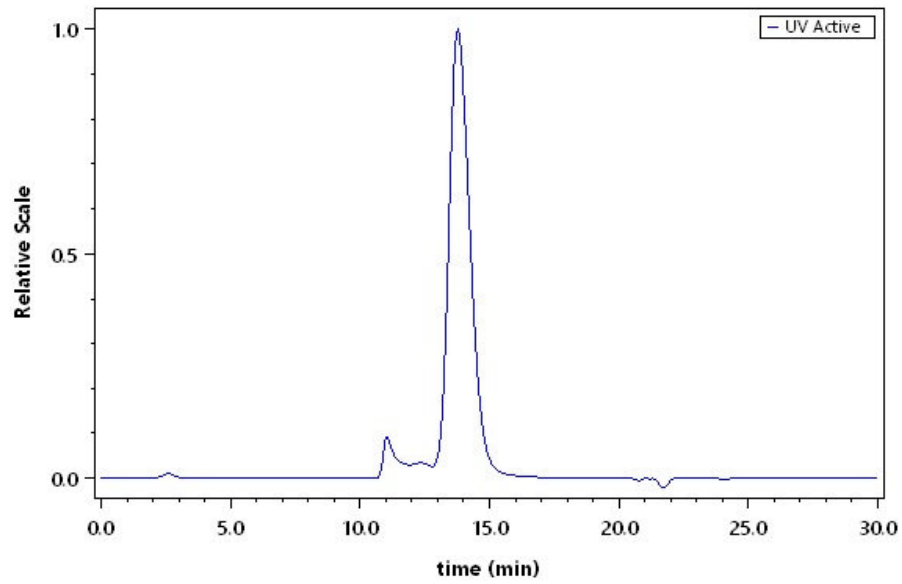
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



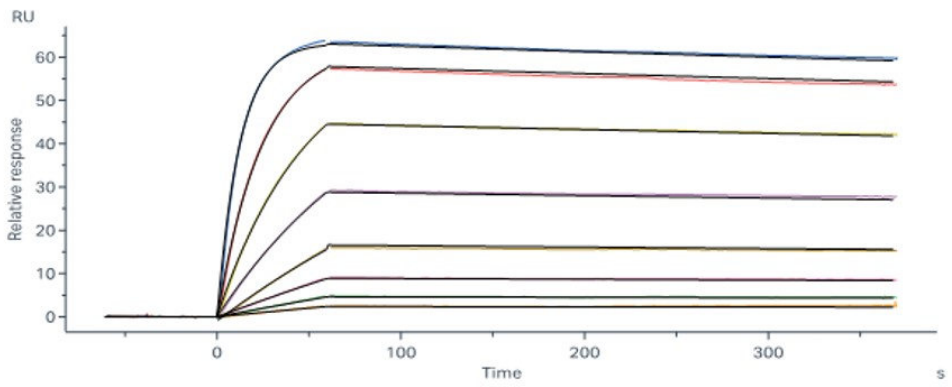
Human IL-1 RAcP Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human IL-1 RAcP Protein, His Tag (Cat. No. ILP-H5225AI2) was greater than 85% as determined by SEC-HPLC.

Activity-SPR



Nadunolimab (biosimilar) captured on Protein A Chip can bind Human IL-1 RAcP Protein, His Tag (Cat. No. ILP-H5225AI2) with an affinity constant of 635 pM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin-1 receptor accessory protein (IL1RAP or IL-1RAcP) is also known as Interleukin-1 receptor 3 (IL-1R-3 or IL-1R3), C3orf13, which belongs to the interleukin-1 receptor family. IL1RAP contains three Ig-like C2-type (immunoglobulin-like) domains and one TIR domain. IL1RAP is detected in liver, skin, placenta, thymus and lung. IL-1R3 / IL1RAP is coreceptor with IL1R1, associates with IL1R1 bound to IL1B to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B and other pathways.