Human IL-5 Protein, His Tag

Catalog # IL5-H52H3AI2

Application

Human IL-5 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

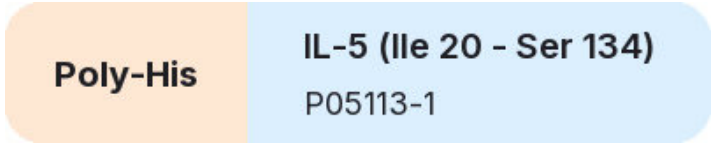
IL-5, TRF, IL5, Interleukin-5

Source

Human IL-5 Protein, His Tag (IL5-H52H3AI2) is expressed from human 293 cells (HEK293). It contains AA Ile 20 - Ser 134 (Accession # P05113-1).

Predicted N-terminus: His

Molecular Characterization



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

The protein has a calculated MW of 15.0 kDa. The protein migrates as 17-22 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.

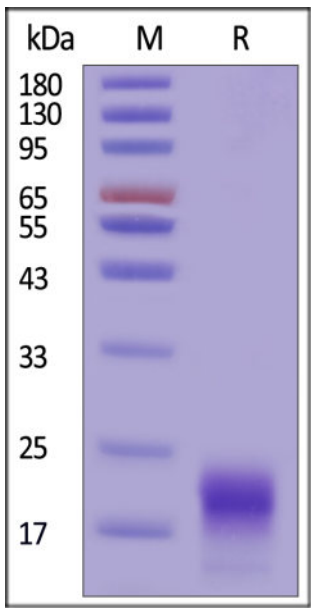
This product is stable after storage at:

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

ACRO Quality Management System

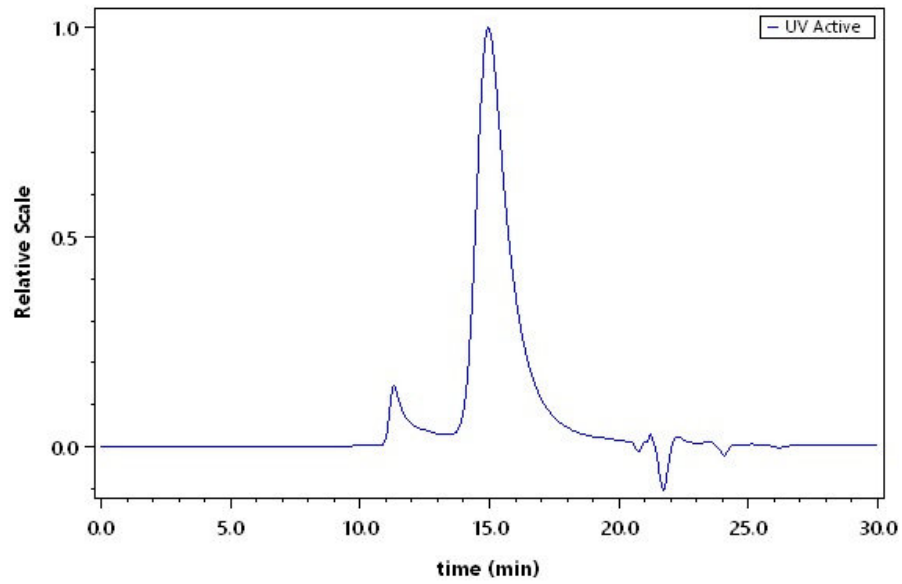
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



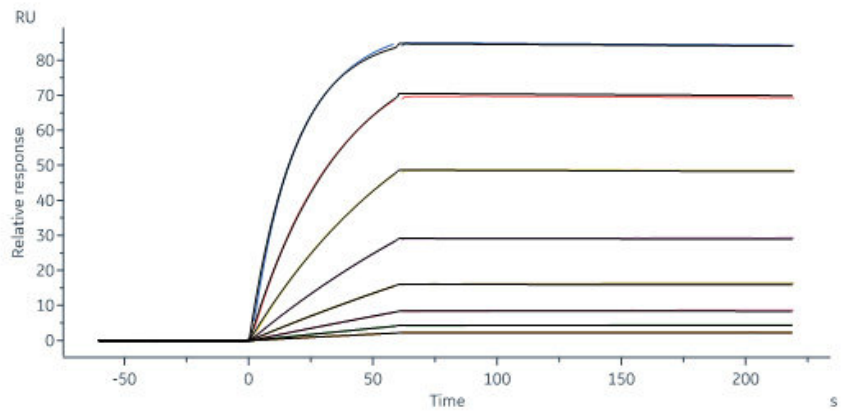
Human IL-5 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human IL-5 Protein, His Tag (Cat. No. IL5-H52H3AI2) was greater than 90% as determined by SEC-HPLC.

Activity-SPR



Monoclonal Anti-IL-5 (Mepolizumab) Antibody, Human IgG1 captured on Protein A Chip can bind Human IL-5 Protein, His Tag (Cat. No. IL5-H52H3AI2) with an affinity constant of 0.126 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin 5 (IL5) is an interleukin produced by type-2 T helper cells and mast cells. IL-5 is a 115-amino acid (in human, 133 in the mouse) -long TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely interleukin 3 and GM-CSF), this glycoprotein in its active form is a homodimer. Interleukin-5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma, wherein a large increase in the number of circulating, airway tissue, and induced sputum eosinophils have been observed. Given the high concordance of eosinophils and, in particular, allergic asthma pathology, it has been widely speculated that eosinophils have an important role in the pathology of this disease. Drugs that target IL-5 are mepolizumab and reslizumab.

Discounts, Gifts, and more!