Human IL-12 R beta 1 / CD212 Protein, His Tag

Catalog # ILB-H52H9AI2

Application

Human IL-12 R beta 1 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-12 R beta 1, IL12RB1, CD212, IL12R, IL12RB, IL-12RB1

Source

Human IL-12 R beta 1 Protein, His Tag (ILB-H52H9AI2) is expressed from human 293 cells (HEK293). It contains AA Cys 24 - Glu 540 (Accession # P42701-1).

Predicted N-terminus: Cys 24

Molecular Characterization



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

The protein has a calculated MW of 59.0 kDa. The protein migrates as 75-95 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.

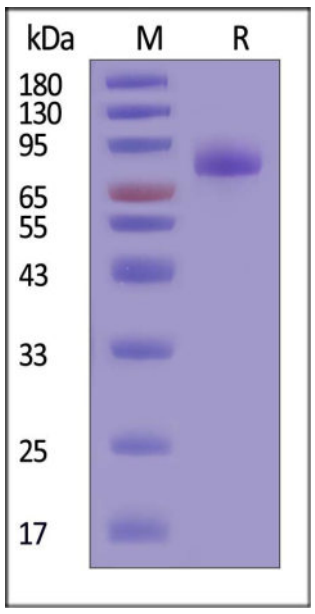
This product is stable after storage at:

- 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



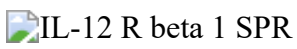
Human IL-12 R beta 1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human IL-12 R beta 1 Protein, His Tag (Cat. No. ILB-H52H9AI2) was greater than 85% as determined by SEC-HPLC.

Activity-SPR



Human IL-12B&IL-12A Heterodimer Protein, His Tag&Flag Tag (Cat. No. IL2-H4210) immobilized on CM5 Chip can bind Human IL-12 R beta 1 Protein, His Tag (Cat. No. ILB-H52H9AI2) with an affinity constant of 0.747 μM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

The human IL-12 R subunit is a member of the cytokine receptor superfamily and the functional high-affinity IL-12R is composed of at least two beta-type cytokine receptor subunits, each independently exhibiting a low affinity for IL-12. IL-12 R beta 1 (Interleukin-12 receptor subunit beta-1) is also known as IL-12RB1, CD212. Functions as an interleukin receptor which binds interleukin-12 with low affinity and is involved in IL12 transduction. Associated with IL12RB2 it forms a functional, high affinity receptor for IL12. Associates also with IL23R to form the interleukin-23 receptor which functions in IL23 signal transduction probably through activation of the Jak-Stat signaling cascade.

Discounts, Gifts, and more!