



### Synonym

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

### Source

Human IL-12 R beta 1, Fc Tag(ILB-H5255) is expressed from human 293 cells (HEK293). It contains AA Cys 24 - Glu 540 (Accession # [P42701-1](#)).

Predicted N-terminus: Cys 24

### Molecular Characterization

IL-12RB1(Cys 24 - Glu 540) P42701-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 83.5 kDa. The protein migrates as 95-110 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

### Storage

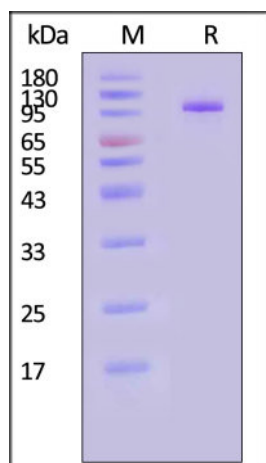
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

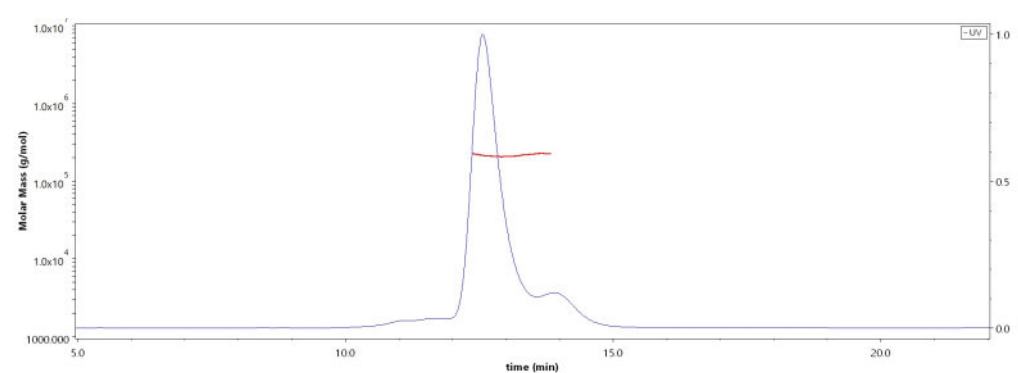
### SDS-PAGE



Human IL-12 R beta 1, Fc 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](#)).

### Bioactivity-ELISA

### SEC-MALS

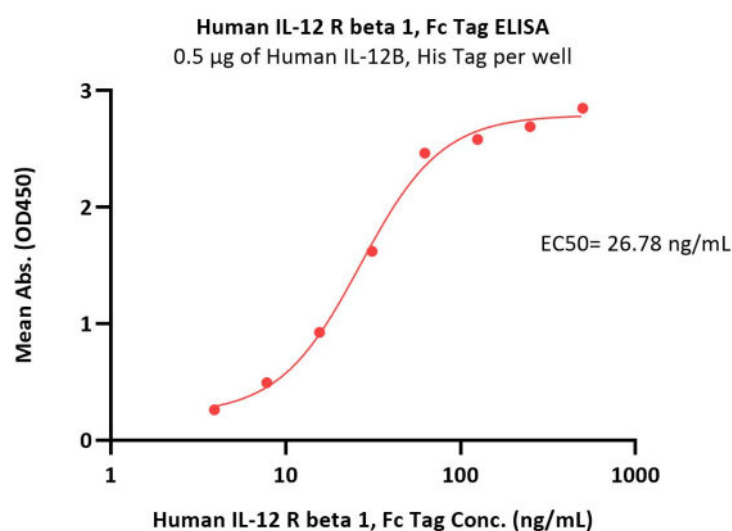


The purity of Human IL-12 R beta 1, Fc Tag (Cat. No. ILB-H5255) is more than 90% and the molecular weight of this protein is around 190-230 kDa verified by SEC-MALS.

[Report](#)

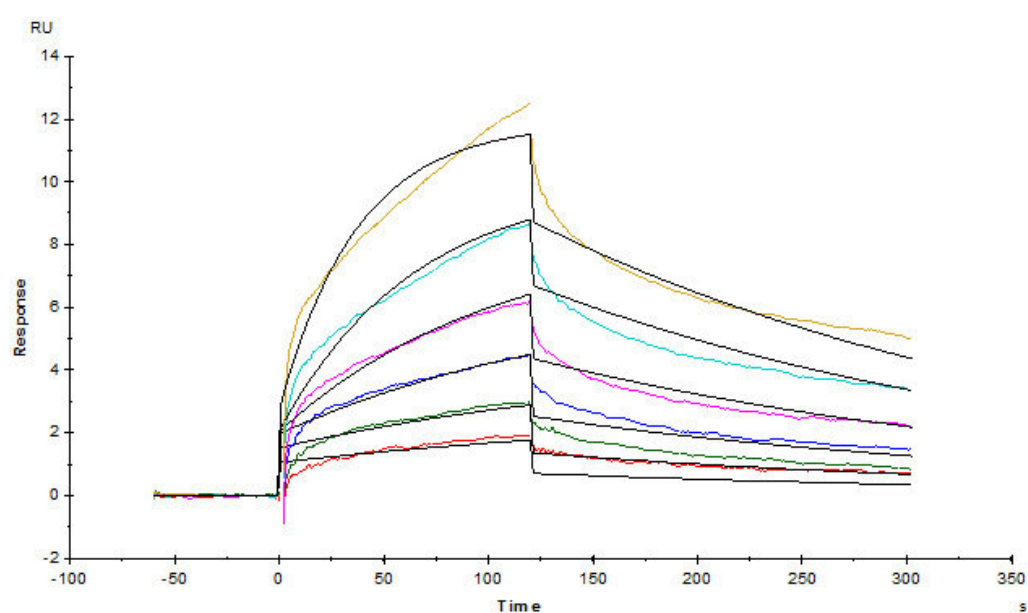
Discounts, Gifts,  
and more!





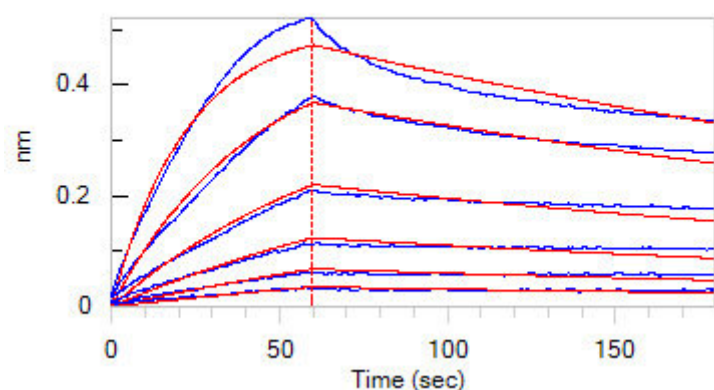
Immobilized Human IL-12B, His Tag (Cat. No. NK2-H52H7) at 5 µg/mL (100 µL/well) can bind Human IL-12 R beta 1, Fc Tag (Cat. No. ILB-H5255) with a linear range of 4-63 ng/mL (QC tested).

**Bioactivity-SPR**

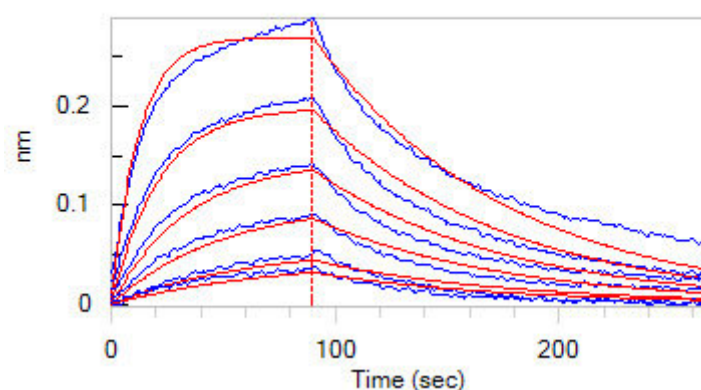


Human IL-12 R beta 1, Fc Tag (Cat. No. ILB-H5255) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human IL-12B&IL-12A Heterodimer Protein, His Tag&Flag Tag (Cat. No. IL2-H4210) with an affinity constant of 2.06 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

**Bioactivity-BLI**



Loaded Human IL-12 R beta 1, Fc Tag (Cat. No. ILB-H5255) on Protein A Biosensor, can bind Human IL-12B, His Tag (Cat. No. NK2-H52H7) with an



Loaded Human IL-12B&IL-12A Heterodimer Protein, His Tag&Flag Tag (Cat. No. IL2-H4210) on HIS1K Biosensor, can bind Human IL-12 R beta 1, Fc Tag

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and more!



# Human IL-12 R beta 1 / CD212 Protein, Fc Tag (MALS verified)

Catalog # ILB-H5255



BIOSYSTEMS  
**Acro**

affinity constant of 7.14 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

(Cat. No. ILB-H5255) with an affinity constant of 32.3 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely 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.

## Clinical and Translational Updates

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