

**Synonym**

IL-2 R beta &amp; IL-2 R alpha &amp; IL-2 R gamma

**Source**

Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag(ILG-H5257) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 & Glu 22 - Ser 212 & Leu 23 - Asn 254 (Accession # [P14784-1](#) (IL-2RB) & [P01589-1](#) (IL-2RA) & [P31785-1](#) (IL-2RG)).

Predicted N-terminus: Ala 27 & Glu 22

**Molecular Characterization**

Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag is produced by co-expression of IL-2RB and IL-2RA and IL-2RG, has a calculated MW of 51.1 kDa (IL-2RB) and 75.4 kDa (IL-2RA&IL-2RG). Subunit IL-2RB is fused with a human IgG1 Fc tag at the C-terminus and subunit IL-2RA&IL-2RG is fused with a human IgG1 Fc tag at the C-terminus. The reducing (R) protein migrates as 60-66 kDa and 100-116 kDa respectively due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% 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.*

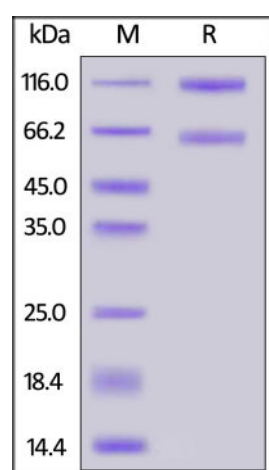
**Storage**

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

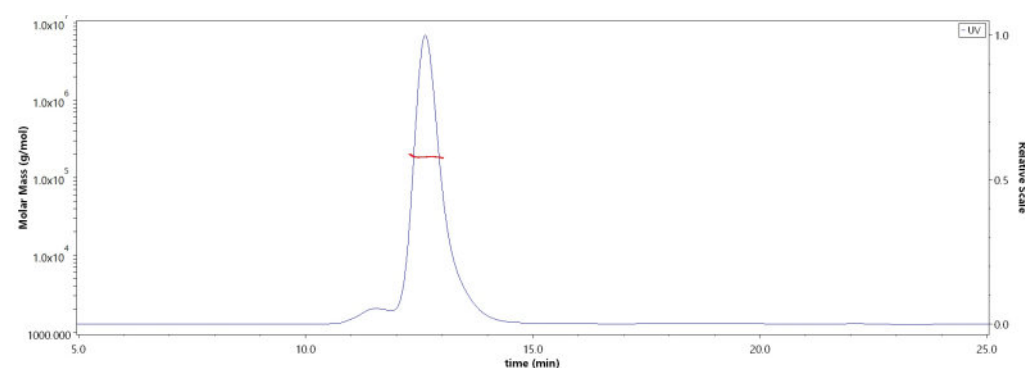
*Please avoid repeated freeze-thaw cycles.*

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.

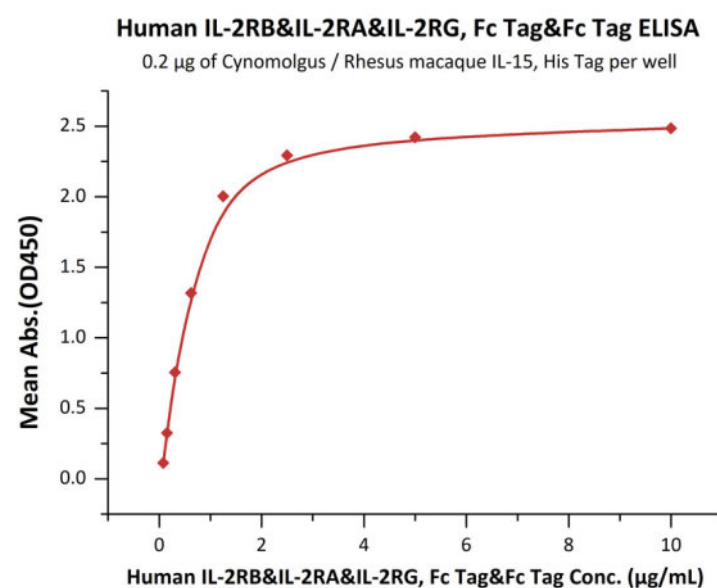
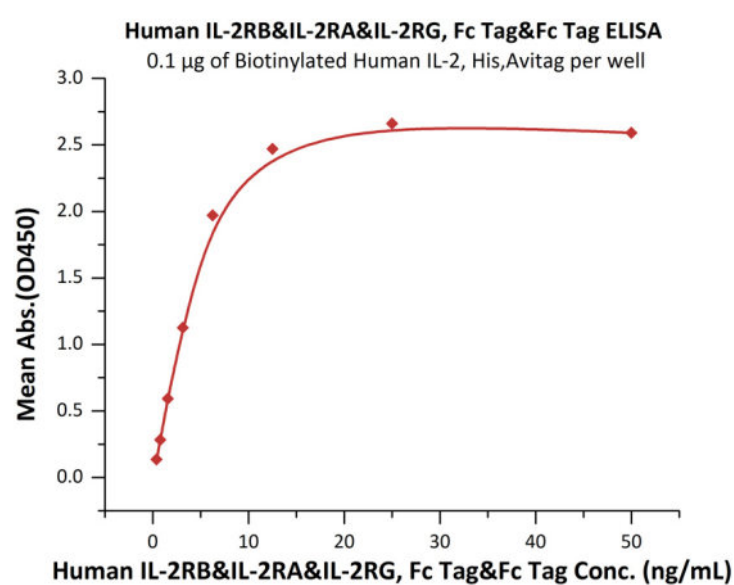
**SDS-PAGE**

Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA****SEC-MALS**

The purity of Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag (Cat. No. ILG-H5257) is more than 90% and the molecular weight of this protein is around 160-190 kDa verified by SEC-MALS.

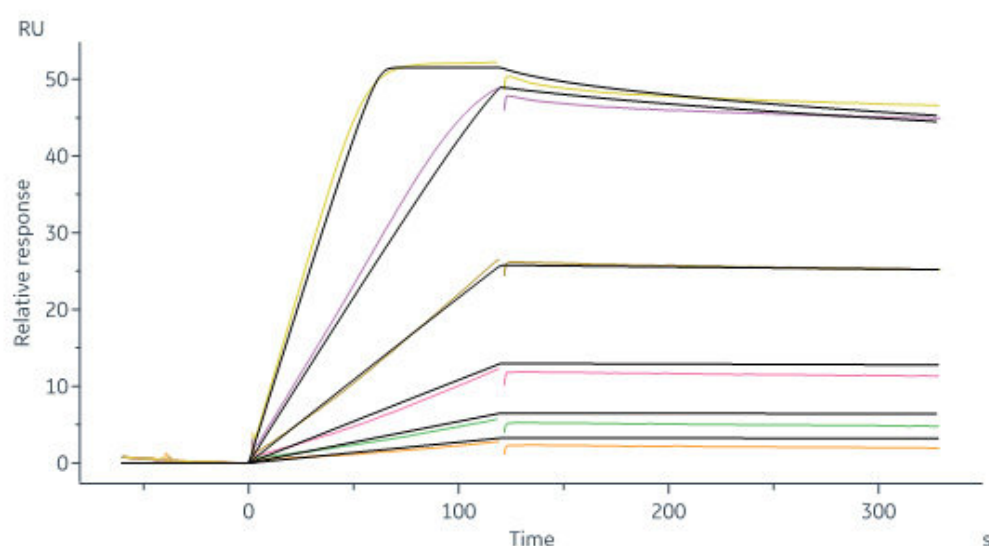
[Report](#)



Immobilized Biotinylated Human IL-2, His,Avitag (Cat. No. IL2-H82E4) at 1 µg/mL (100 µL/well) on streptavidin precoated (0.5 µg/well) plate can bind Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag (Cat. No. ILG-H5257) with a linear range of 0.4-6 ng/mL (QC tested).

Immobilized Cynomolgus / Rhesus macaque IL-15, His Tag (Cat. No. IL5-C52H4) at 2 µg/mL (100 µL/well) can bind Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag (Cat. No. ILG-H5257) with a linear range of 0.078-1.25 µg/mL (Routinely tested).

### Bioactivity-SPR



Human IL-2RB&IL-2RA&IL-2RG, Fc Tag&Fc Tag (Cat. No. ILG-H5257) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human IL-2, Tag Free with an affinity constant of 40.6 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

### Background

Both Interleukin-2 receptor subunit beta and Interleukin-2 receptor subunit gamma are receptor for interleukin-2. Common subunit for the receptors for a variety of interleukins. Interacts with SHB upon interleukin stimulation. Probably in association with IL15RA, involved in the stimulation of neutrophil phagocytosis by IL15. This beta subunit is involved in receptor mediated endocytosis and transduces the mitogenic signals of IL2. IL2R exists in 3 different forms: a high affinity dimer, an intermediate affinity monomer (beta subunit), and a low affinity monomer (alpha subunit). The high and intermediate affinity forms also associate with a gamma subunit.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.