

Synonym

IL-2 R beta & IL-2 R gamma, IL-2RB & IL-2RG

Source

Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag(ILG-H5254) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 (IL-2RB) & Leu 23 - Asn 254 (IL-2RG) (Accession # [P14784-1](#) (IL-2RB) & [P31785-1](#) (IL-2RG)).

Predicted N-terminus: Ala 27 (IL-2RB) & Leu 23 (IL-2RG)

Molecular Characterization

IL-2RB(Ala 27 - Asp 239) P14784-1	Fc(Pro 100 - Lys 330) P01857
IL-2RG(Leu 23 - Asn 254) P31785-1	Fc(Pro 100 - Lys 330) P01857

Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag is produced by co-expression of IL-2RB and IL-2RG, has a calculated MW of 51.1 kDa (IL-2RB) and 53.6 kDa (IL-2RG). Subunit IL-2RB is fused with a human IgG1 Fc tag at the C-terminus and subunit IL-2RG is fused with a human IgG1 Fc tag at the C-terminus. The reducing (R) protein migrates as 60-65 kDa and 70-75 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.

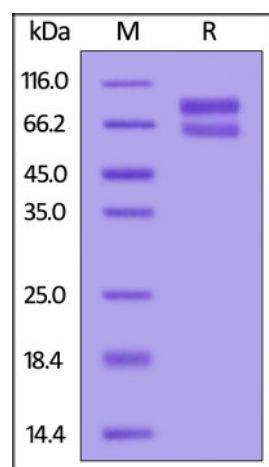
Storage

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

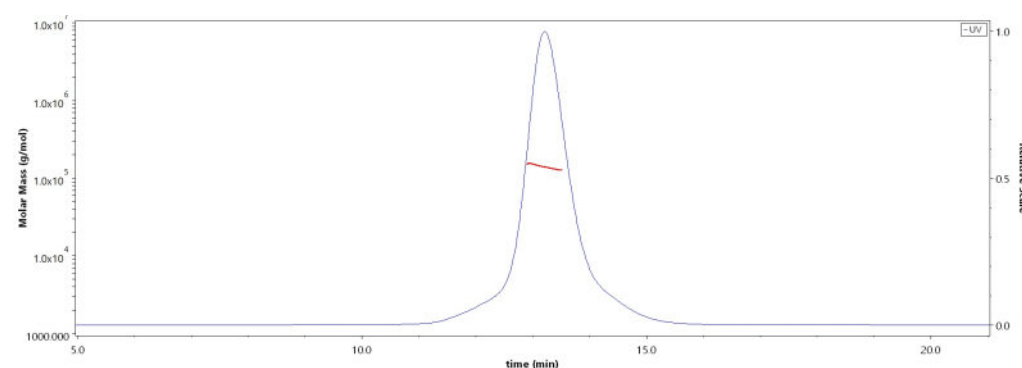
Please avoid repeated freeze-thaw cycles.

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

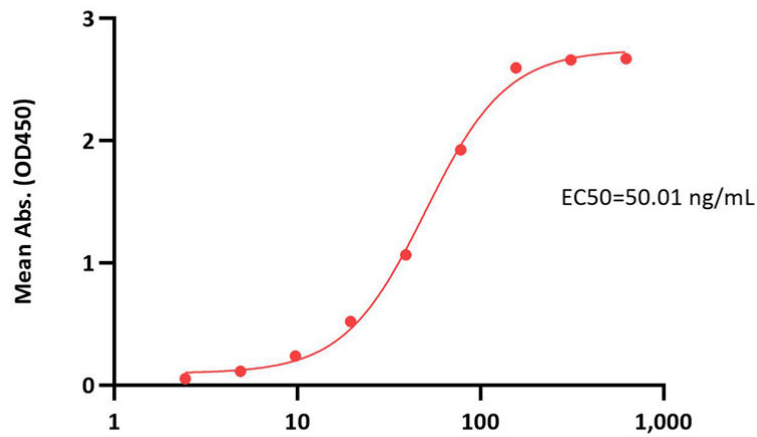
Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA**SEC-MALS**

The purity of Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. ILG-H5254) is more than 90% and the molecular weight of this protein is around 120-150 kDa verified by SEC-MALS.

[Report](#)

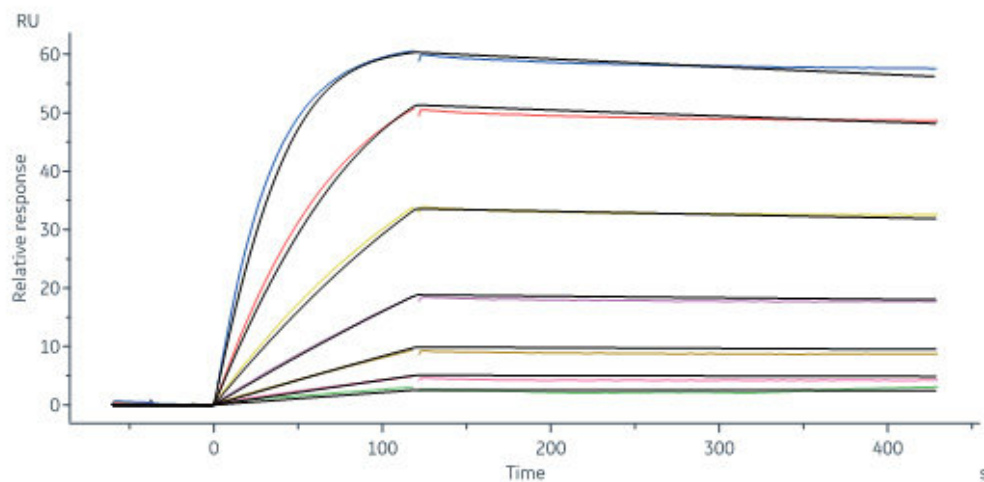
Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag (MALS verified) ELISA
0.5 µg of Human IL-2, Tag Free per well



Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag (MALS verified) Conc. (ng/mL)

Immobilized Human IL-2 Protein, premium grade (Cat. No. IL2-H5215) at 5 µg/mL (100 µL/well) can bind Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag (MALS verified) (Cat. No. ILG-H5254) with a linear range of 2-156 ng/mL (QC tested).

Bioactivity-SPR



Human IL-2RB&IL-2RG Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. ILG-H5254) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human IL-2, Tag Free with an affinity constant of 0.279 nM 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 if you have any question on this product.