

Synonym

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

Source

Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep Tag(ILG-R5223) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Glu 239 (IL-2RB) & Glu 22 - Gln 235 (IL-2RA) & Ser 25 - Ala 262 (IL-2RG) (Accession # [P26896-1](#) (IL-2RB) & [P26897-1](#) (IL-2RA) & [Q68FU6-1](#) (IL-2RG)).

Predicted N-terminus: Ala 27 (IL-2RB) & Glu 22 (IL-2RA)

Molecular Characterization

Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep Tag is produced by co-expression of IL-2RB and IL-2RA and IL-2RG, has a calculated MW of 30.2 kDa (IL-2RB) and 59.3 kDa (IL-2RA&IL-2RG). Subunit IL-2RB is fused with a his tag at the C-terminus and subunit IL-2RA&IL-2RG is fused with a Twin-Strep Tag at the C-terminus. The reducing (R) protein migrates as 45 kDa and 110 kDa respectively due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

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.

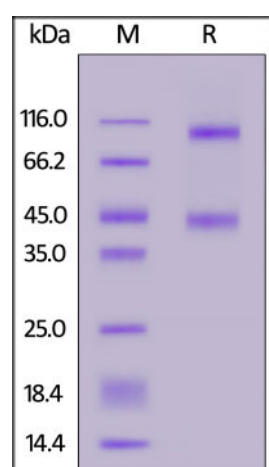
Storage

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

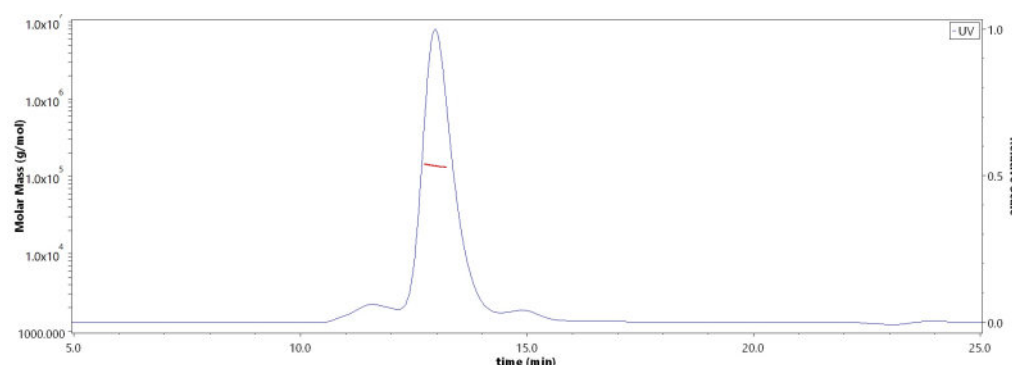
Please avoid repeated freeze-thaw cycles.

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.

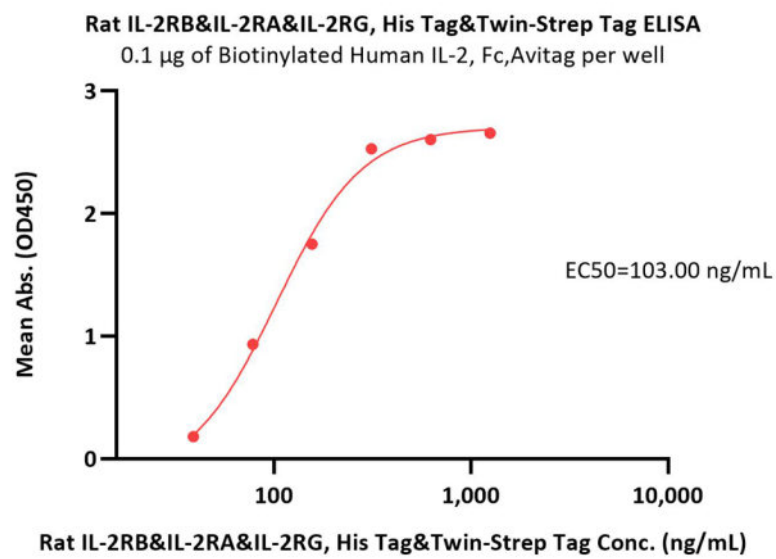
SDS-PAGE

Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep 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**

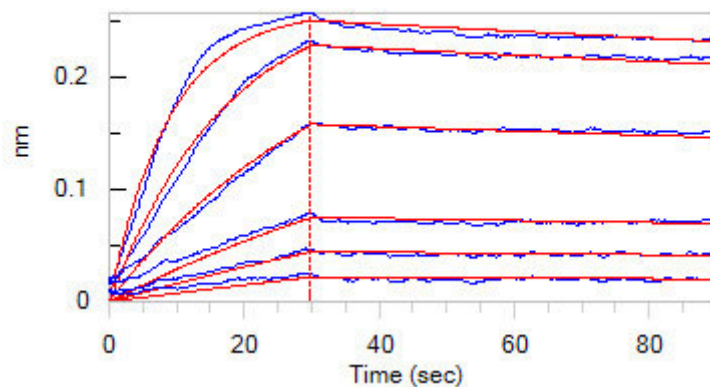
The purity of Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep Tag (Cat. No. ILG-R5223) is more than 85% and the molecular weight of this protein is around 125-145 kDa verified by SEC-MALS.

[Report](#)



Immobilized Biotinylated Human IL-2, Fc,Avitag (Cat. No. IL2-H82F3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep Tag (Cat. No. ILG-R5223) with a linear range of 39-156 ng/mL (QC tested).

Bioactivity-BLI



Loaded Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep Tag (Cat. No. ILG-R5223) on NTA Biosensor, can bind Human IL-2, Tag Free with an affinity constant of 1.16 nM as determined in BLI assay (ForteBio Octet Red96e) (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.