Human IL-2 R beta&IL-2 R alpha&IL-2 R gamma Protein, His Tag&Twin Strep Tag (MALS verified)

Catalog # ILG-H52W9





Synonym

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

Source

Human IL-2RB&IL-2RA&IL-2RG, His Tag&Twin Strep Tag(ILG-H52W9) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 (IL-2RB) & Glu 22 - Ser 212 (IL-2RA) & Leu 23 - Asn 254 (IL-2RG) (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, His Tag&Twin Strep Tag is produced by co-expression of IL-2RB and IL-2RA and IL-2RG, has a calculated MW of 29.9 kDa (IL-2RB) & 55.8 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 protein migrates as 37 kDa,42 kDa and 90 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 $0.22~\mu m$ 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

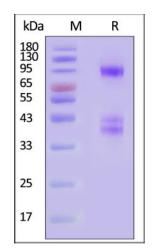
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

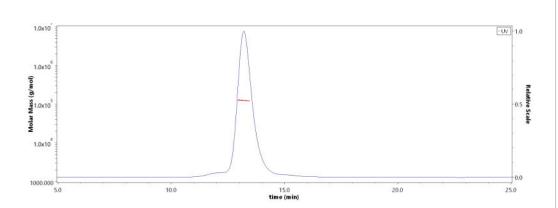
SDS-PAGE



Human IL-2RB&IL-2RA&IL-2RG, 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 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

SEC-MALS



The purity of Human IL-2RB&IL-2RA&IL-2RG, His Tag&Twin Strep Tag (Cat. No. ILG-H52W9) is more than 90% and the molecular weight of this protein is around 120-160 kDa verified by SEC-MALS.

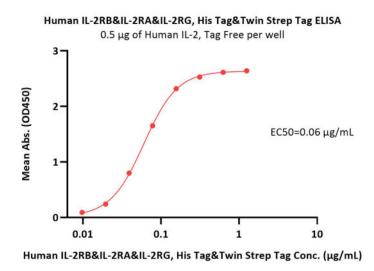
Report



Human IL-2 R beta&IL-2 R alpha&IL-2 R gamma Protein, His Tag&Twin Strep Tag (MALS verified)

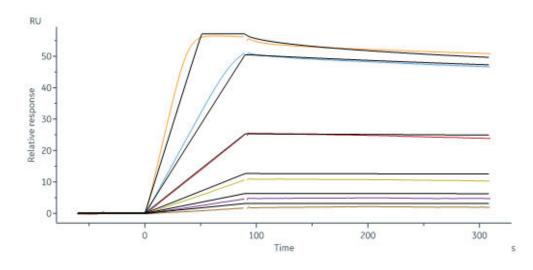
Catalog # ILG-H52W9





Immobilized Human IL-2, Tag Free at 5 μ g/mL (100 μ L/well) can bind Human IL-2RB&IL-2RA&IL-2RG, His Tag&Twin Strep Tag (Cat. No. ILG-H52W9) with a linear range of 0.01-0.313 μ g/mL (QC tested).

Bioactivity-SPR



Human IL-2RB&IL-2RA&IL-2RG, His Tag&Twin Strep Tag (Cat. No. ILG-H52W9) captured on CM5 chip via anti-His antibody can bind Human IL-2, Tag Free with an affinity constant of 56.9 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

