

# Human IL-2 R beta&IL-2 R gamma Protein

Cat. No. ILR-HM2BG

## Description

|                         |   |
|-------------------------|---|
| <b>Source</b>           | Recombinant Human IL-2 R beta&IL-2 R gamma Protein is expressed from HEK293 with hFc tag at the C-Terminus.<br>It contains Ala27-Thr240 (IL-2 R beta)&Leu23-Ala262 (IL-2 R gamma).  |
| <b>Accession</b>        | P14784(IL-2 R beta)&P31785-1(IL-2 R gamma)  |
| <b>Molecular Weight</b> | The protein has a predicted MW of 51.3 kDa (IL-2 R beta)&54.6 kDa (IL-2 R gamma). Due to glycosylation, the protein migrates to 65-70 kDa&80-100 kDa based on Bis-Tris PAGE result. |
| <b>Endotoxin</b>        | Less than 1EU per µg by the LAL method.   |
| <b>Purity</b>           | > 95% as determined by Bis-Tris PAGE<br>> 95% as determined by HPLC   |

## Formulation and Storage

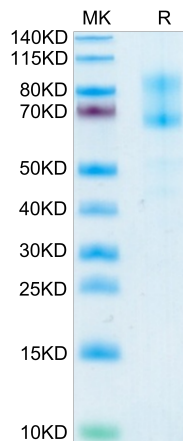
|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.  |
| <b>Reconstitution</b> | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.  |
| <b>Storage</b>        | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

## Background

Wilms' tumor 1 (WT1) is a transcription factor which plays a major role in cell proliferation, differentiation, survival, and apoptosis. WT1 was first identified as a tumor suppressor gene in Wilms' tumor. The expression of survival signaling genes, IL-2, IL-2RB, and IL-2RG, was also suppressed after WT1-siRNA treatment. In addition, the WT1 silencing also inhibited the S phase of the cell cycle and induced cell death. Moreover, transcriptional modulation of IL-2, IL-2RB, and IL2-2RG expression by WT1 was likely involved in this phenotypic change.

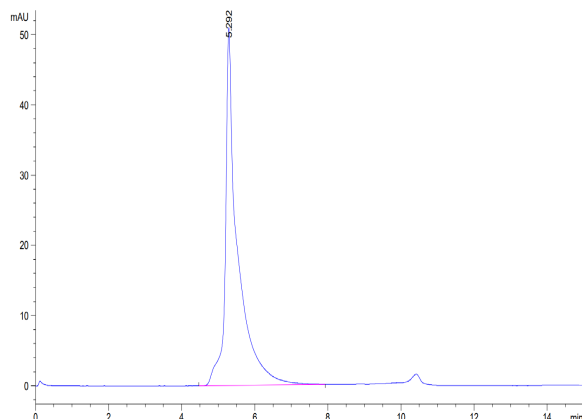
## Assay Data

### Bis-Tris PAGE



Human IL-2 R beta&IL-2 R gamma on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



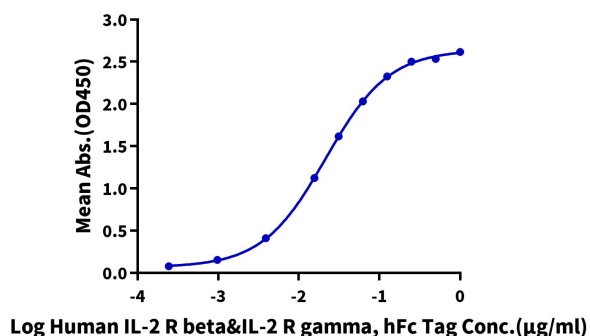
The purity of Human IL-2 R beta&IL-2 R gamma is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

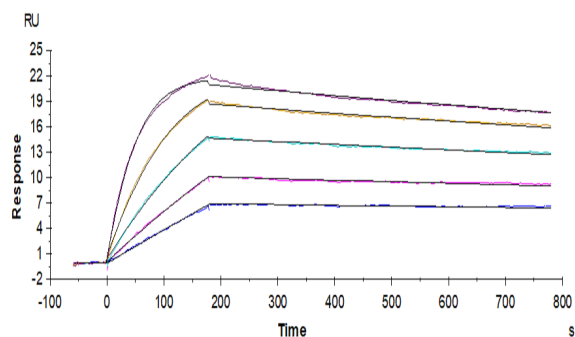
Human IL-2 R beta&IL-2 R gamma, hFc Tag ELISA

0.2µg Human IL-15Ra&IL-15, His Tag Per Well



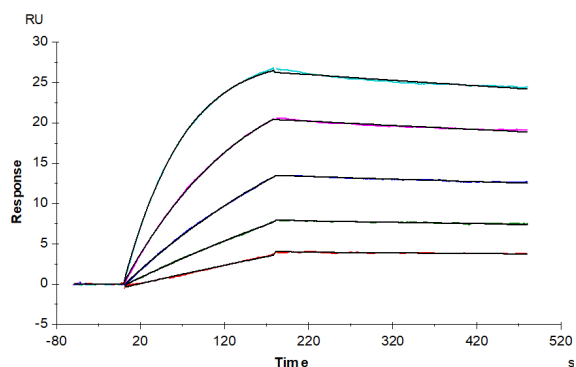
Immobilized Human IL-15RA&IL-15, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human IL-2 R beta&IL-2 R gamma, hFc Tag with the EC50 of 21.5ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-2 R beta&IL-2 R gamma, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-2, No Tag with an affinity constant of 0.114 nM as determined in SPR assay (Biacore T200).

SPR Data



Human IL-2 R beta&IL-2 R gamma, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-15Ra&IL-15, His Tag with an affinity constant of 0.084 nM as determined in SPR assay (Biacore T200).