

Human IL-15 Protein

Cat. No. IL5-HE015



Description

|                  |                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------|
| Source           | Recombinant Human IL-15 Protein is expressed from E.coli without tag.<br>It contains Asn49-Ser162. |
| Accession        | P40933                                                                                             |
| Molecular Weight | The protein has a predicted MW of 12.8 kDa same as Bis-Tris PAGE result.                           |
| Endotoxin        | Less than 0.05 EU per µg by the LAL method.                                                        |
| Purity           | > 95% as determined by Bis-Tris PAGE<br>> 95% as determined by HPLC                                |

Formulation and Storage

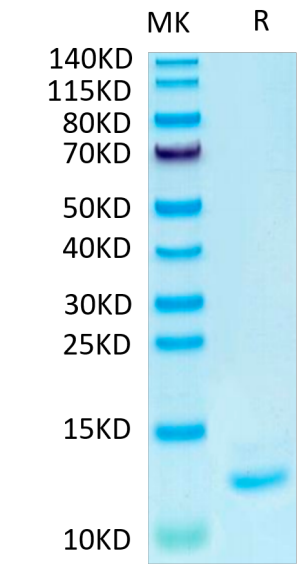
|                |                                                                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formulation    | Lyophilized from 0.22 µm filtered solution in 20 mM Tris, 150 mM NaCl (pH 7.5). Normally 8% mannitol is added as protectant before lyophilization.                                                                      |
| Reconstitution | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.                                                                                             |
| Storage        | -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

Interleukin 15 (IL-15) is a widely expressed 14 kDa cytokine that is structurally and functionally related to IL-2 and plays an important role in many immunological diseases. IL-15 is a cytokine that stimulates the proliferation of T-lymphocytes. Stimulation by IL15 requires interaction of IL15 with components of the IL2 receptor, including IL2RB and probably IL2RG but not IL2RA.

Assay Data

Bis-Tris PAGE



Human IL-15 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

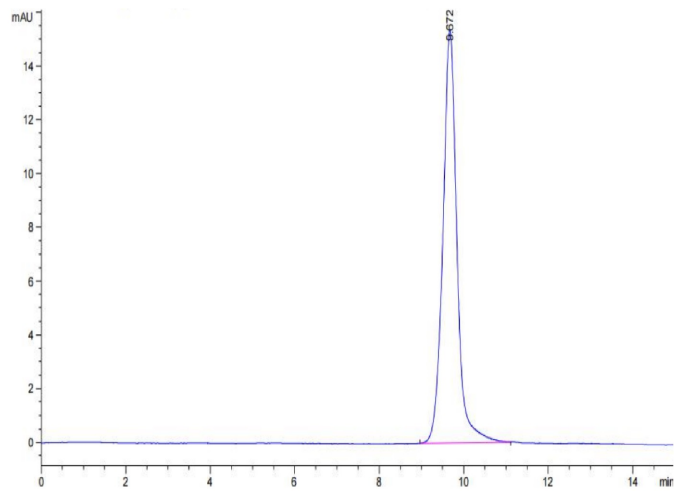
SEC-HPLC

Human IL-15 Protein

Cat. No. IL5-HE015



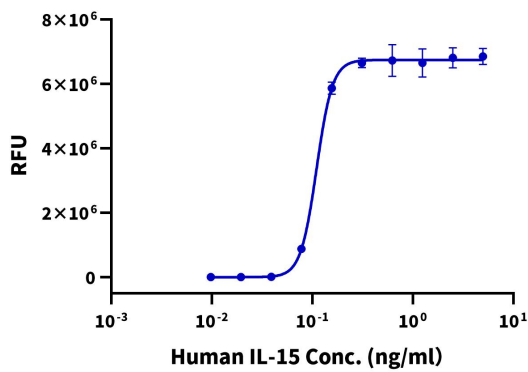
Assay Data



The purity of Human IL-15 is greater than 95% as determined by SEC-HPLC.

Cell Based Assay

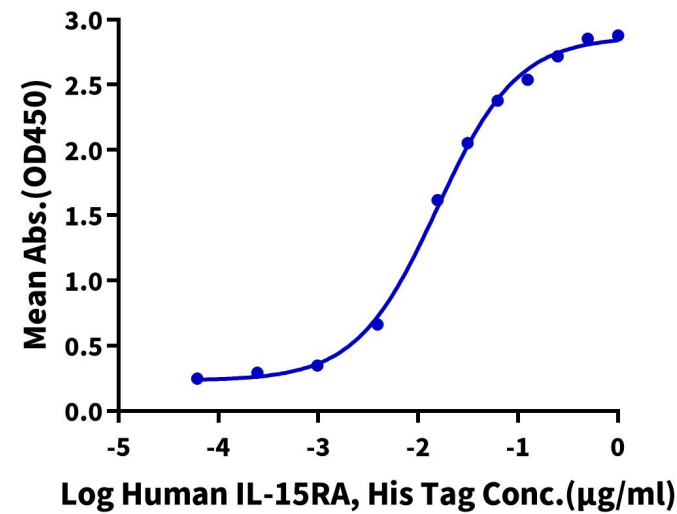
Recombinant Human IL-15 Bioactivity



Measured in a cell proliferation assay using CTLL-2 cells. The ED50 for this effect is 0.1 - 0.3 ng/mL. The specific activity of recombinant human IL-15 is  $> 1 \times 10^7$  units/mg, which is calibrated against the human IL-15 reference standard (NIBSC code: 95/554) (QC Test).

ELISA Data

Human IL-15, No Tag ELISA  
0.2µg Human IL-15, No Tag Per Well



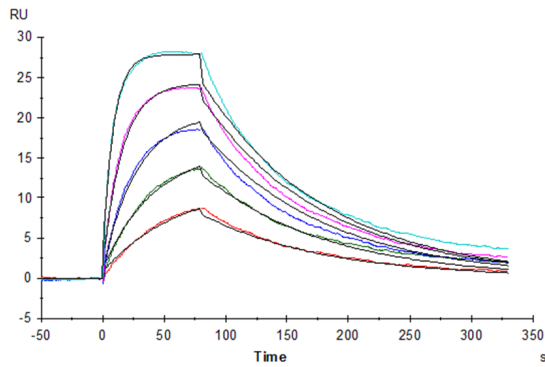
Immobilized Human IL-15, No Tag at 2 µg/ml (100 µl/Well) on the plate. Dose response curve for Human IL-15RA, His Tag with the EC50 of 15.4 ng/ml determined by ELISA.

SPR Data

## Human IL-15 Protein

Cat. No. IL5-HE015

### Assay Data



Human IL-2 R beta, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human IL-15, No Tag with an affinity constant of 5.9 nM as determined in SPR assay (Biacore T200).