

Human IL-18 Protein

Cat. No. IL1-HE018



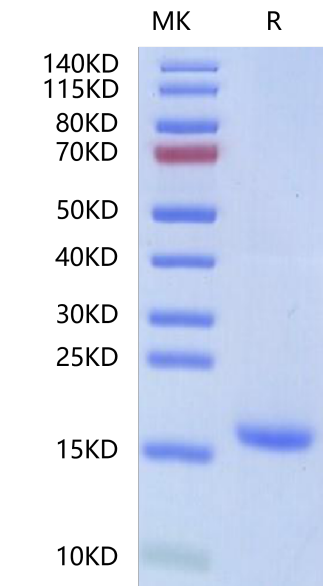
| Description      |                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------|
| Source           | Recombinant Human IL-18 Protein is expressed from E.coli without tag.<br>It contains Tyr37-Asp193. |
| Accession        | Q14116                                                                                             |
| Molecular Weight | The protein has a predicted MW of 18.2 kDa same as Bis-Tris PAGE result.                           |
| Endotoxin        | Less than 0.1 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 0.22µm filtered solution in 20mM PB, 250mM NaCl, 50mM L-arginine (pH 7.4). Normally 8% trehalose 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 (IL)-18 was originally discovered as a factor that enhanced IFN-γ production from anti-CD3-stimulated Th1 cells, especially in the presence of IL-12. Upon stimulation with Ag plus IL-12, naïve T cells develop into IL-18 receptor (IL-18R) expressing Th1 cells, which increase IFN-γ production in response to IL-18 stimulation. |  |

Assay Data

Bis-Tris PAGE



Human IL-18 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

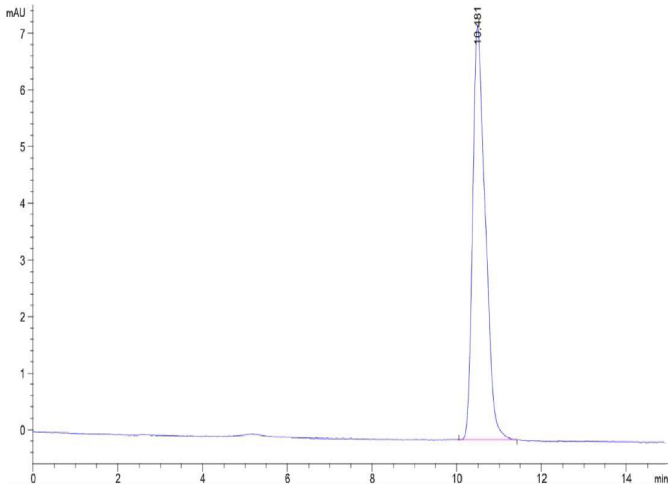
SEC-HPLC

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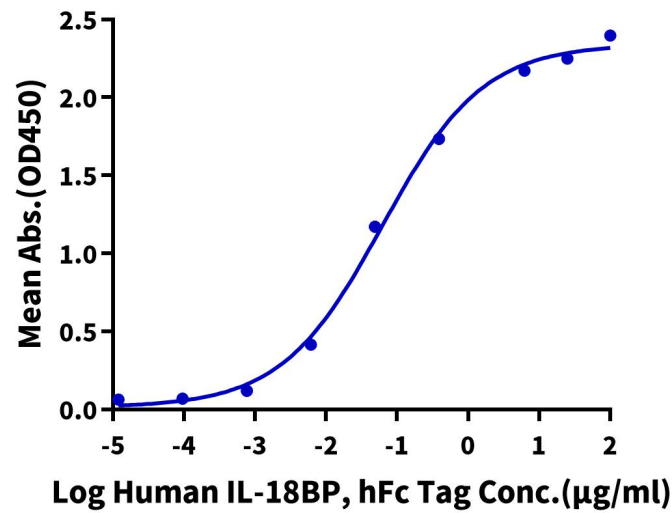
Assay Data



The purity of Human IL-18 is greater than 95% as determined by SEC-HPLC.

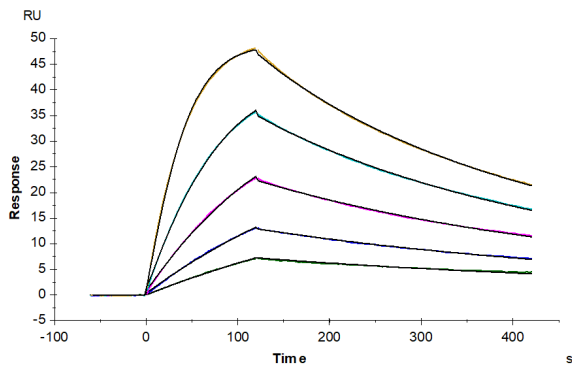
ELISA Data

**Human IL-18, No Tag ELISA**  
0.5µg Human IL-18, No Tag Per Well



Immobilized Human IL-18 at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human IL-18BP, hFc Tag with the EC50 of 62.0ng/ml determined by ELISA (QC Test).

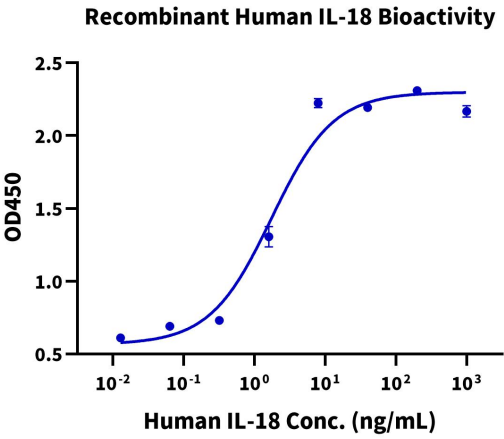
SPR Data



Human IL-18 R1, His Tag captured on CM5 Chip via anti-his antibody can bind Human IL-18, No Tag with an affinity constant of 2.38 nM as determined in SPR assay (Biacore T200).

Cell Based Assay

Assay Data



Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED50 for this effect is 1-5 ng/mL (QC Test).