## **Human IL-21 Protein**

Cat. No. IL2-HE021



| Description         |  |
|---------------------|--|
| Source              | Recombinant Human IL-21 Protein is expressed from E.coli without tag.    |
|                     | It contains Gln32-Ser162.  |
| Accession           | Q9HBE4-1   |
| Molecular<br>Weight | The protein has a predicted MW of 15.4 kDa same as Bis-Tris PAGE result. |
| Endotoxin           | Less than 1EU per μg by the LAL method.                                  |
| Purity              | > 95% as determined by Bis-Tris PAGE                                     |

#### Formulation and Storage

| Formulation    | Lyophilized from 0.22µm filtered solution in 20mM NaAc, 150mM NaCl (pH 5.5). Normally 8% trehalose is added as protectant before lyophilization.                                   |
|----------------|--|
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu$ g/ml is recommended. Dissolve the lyophilized protein in 20mM NaAc, 150mM NaCl (pH 5.5). |

Storage

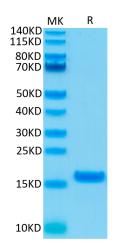
-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

# **Background**

Interleukin-21 (IL-21), produced predominantly by CD4 T cells and natural killer T (NKT) cells, is a newly discovered member of the common γ-chain family of cytokines. It has been implicated in many immunological processes and has been linked to autoimmune diseases, allergies and other inflammatory diseases.

## **Assay Data**

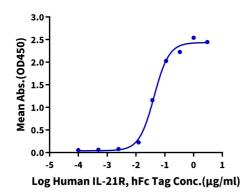
### **Bis-Tris PAGE**



Human IL-21 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

#### **ELISA Data**

Human IL-21, No Tag ELISA 0.2μg Human IL-21, No Tag Per Well



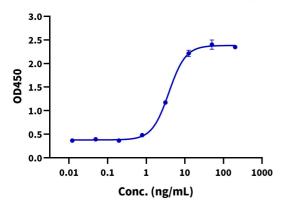
Immobilized Human IL-21, No Tag at  $2\mu g/ml$  (100 $\mu$ l/well) on the plate. Dose response curve for Human IL-21R, hFc Tag with the EC50 of 42.3ng/ml determined by ELISA.



**Assay Data** 

**Cell Based Assay** 

# **Recombinant Human IL-21 Bioactivity**



Measured by its ability to enhance IFN-gamma secretion in NK-92 human natural killer lymphoma cells. The ED50 for this effect is <8 ng/mL (QC Test).