

# Human IL-21 Protein

Cat. No. IL2-HE021

## Description

<b>Source</b>	Recombinant Human IL-21 Protein is expressed from E.coli without tag. It contains Gln32-Ser162.
<b>Accession</b>	Q9HBE4-1
<b>Molecular Weight</b>	The protein has a predicted MW of 15.4 kDa same as 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

## Formulation and Storage

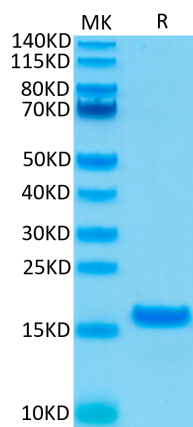
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 20mM NaAc, 150mM NaCl (pH 5.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve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

Interleukin-21 (IL-21), produced predominantly by CD4 T cells and natural killer T (NKT) cells, is a newly discovered member of the common  $\gamma$ -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

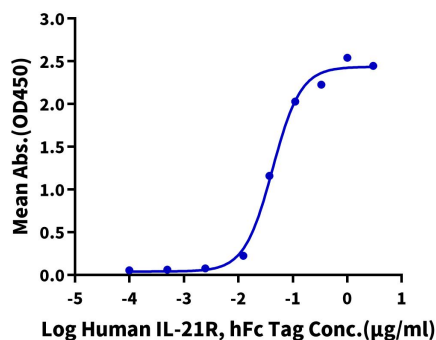
### Bis-Tris PAGE



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

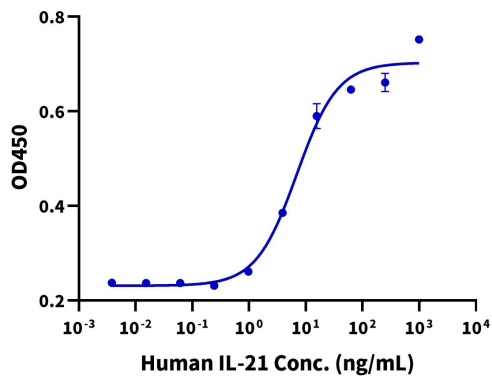


Immobilized Human IL-21, No Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human IL-21R, hFc Tag with the EC50 of 42.3ng/ml determined by ELISA.

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 1-3 ng/mL (QC Test).