

# GMP Human IL-21

Cat. No. GMP-CKS-HE021



## Description

<b>Source</b>	Recombinant GMP Human IL-21 is expressed from E.coli with 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>	≤ 0.01 EU per µg by the LAL method.
<b>Purity</b>	≥ 95% as determined by SEC-HPLC.

## Formulation and Storage

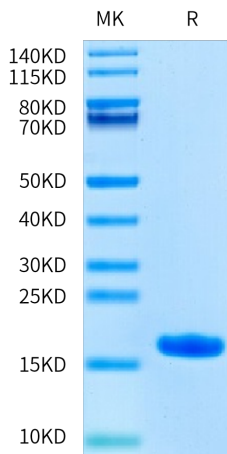
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	The product is shipped with ice bag. Store it immediately at -20°C±5°C upon arrival. -20°C±5°C for 36 months in lyophilized state. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin- (IL-) 21 is a pleiotropic cytokine that regulates the activity of both innate and specific immunity. Indeed, it costimulates T and natural killer (NK) cell proliferation and function and regulates B cell survival and differentiation and the function of dendritic cells. In addition, IL-21 exerts divergent effects on different lymphoid cell leukemia and lymphomas, as it may support cell proliferation or on the contrary induce growth arrest or apoptosis of the neoplastic lymphoid cells.

## Assay Data

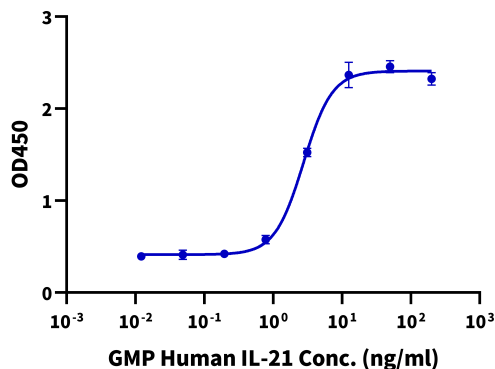
### Bis-Tris PAGE



GMP Human IL-21 on Bis-Tris PAGE under reduced condition.

### Cell Based Assay

#### GMP Human IL-21 Bioactivity



Measured by its activity to enhance IFN-gamma secretion in NK-92 human natural killer lymphoma cells. The ED50 for this effect is ≤ 8 ng/mL. The specific activity of GMP Human IL-21 is > 1 × 10<sup>5</sup> U/mg (QC Test).