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 Weight	The protein has a predicted MW of 15.4 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

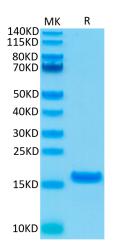
Formulation	Lyophilized from 0.22µm filtered solution in 20mM NaAc, 150mM NaCl (pH 5.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in 20mM NaAc, 150mM NaCl (pH 5.5). Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°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.

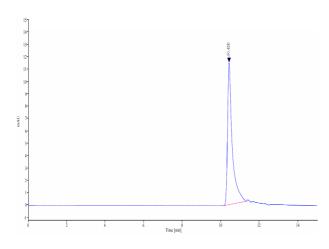
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



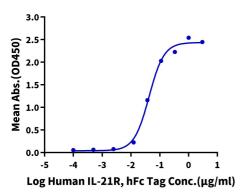
The purity of Human IL-21 is greater than 95% as determined by SEC-HPLC.



Assay Data

ELISA Data

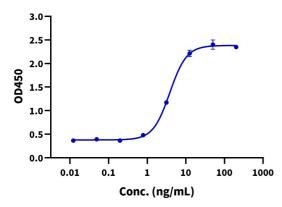
Human IL-21, No Tag ELISA 0.2μg Human IL-21, No Tag Per Well



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

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).