

GFH90AF Recombinant Human IL-21 (Animal-Free)

Description

Interleukin-21 (IL-21) is a member of the common- γ chain family of cytokines that are involved in immunoregulation. IL-21 is normally expressed by activated CD4+ T cells and is aberrantly expressed in Hodgkin lymphoma cells. The IL-21 receptor (IL-21R) activates the JAK/STAT signaling pathway and is expressed on T, B, and Natural Killer (NK) cells. Within the B cell lineage, IL-21 is a switch factor regulating IgG1 and IgG3 antibody production. IL-21 also cooperates with IL-4 for the production of multiple antibody classes in B cells. IL-21 has pleiotropic effects on the proliferation, differentiation, and effector functions of B, T, NK, and dendritic cells.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	132 aa
Molecular Weight	15.4 kDa
Source	E. coli
Accession Number	Q9HBE4
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

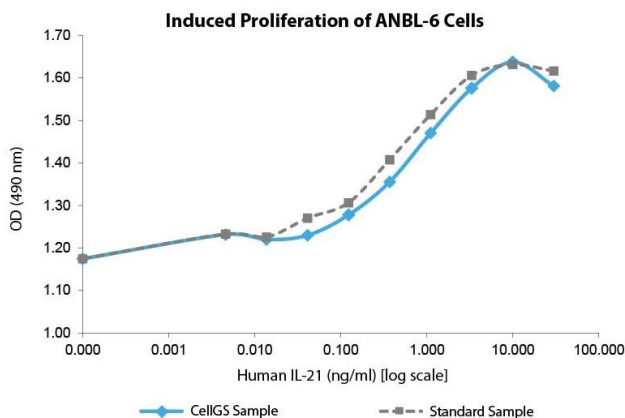
Specifications

Alternative Names	Interleukin-21, interleukin 21, IL21, IL 21
Biological Activity	Human IL-21 is fully biologically active when compared to standard. The activity is determined by the ability to induce B9 cells proliferation and it is typically less than 50 ng/ml. This corresponds to an expected specific activity of 2.0×10^4 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MQDRHMIRMRLQLIDIVDQLK NYVNDLVPEFLPAPEDVETN CEWSAFSCFQ KAQLKSANTG NNERIINVSI KKLKRKPPST NAGRRQKHRL TCPSCDSYEK KPPKEFLERF KSLQKMIHQ HLSSRTHGSE DS

Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM HCl at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane.
Human IL-21 has a predicted Mw of 15.4 kDa.