

GFM70 Recombinant Mouse IL-21

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.

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

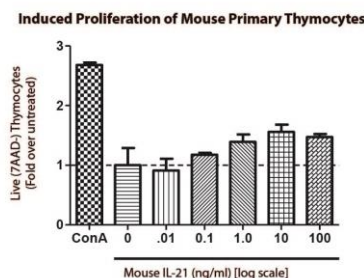
Specifications

Alternative Names	Interleukin-21, interleukin 21, IL21, IL 21
Biological Activity	Mouse IL-21 is fully biologically active when compared to standard. The activity is determined by the ability to induce mouse primary thymocyte cells proliferation and it is typically less than 10 ng/ml. This corresponds to an expected specific activity of 1×10^5 units/mg.
Endotoxin Level	≤ 1.00 EU/ μ g 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 NYVNDLVPEF LPAPEDVETN CEWSAFSCFQ KAQLKSANTG NNERIINVSI KKLKRKPPST NAGRROKHRL TCPSCDSYEK KPPKEFLERF KSLQKMIHQ HLSRTHGSE 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



Induced proliferation of mouse primary thymocytes cells cultured on an anti-CD63e coated plates for Mouse IL-21. Cell proliferation was measured to calculate the ED50, which is as expected less than 10 ng/ml.