
Product Data Sheet

Product Name: IL 21 Mouse

Cat. No.: GP20617

Batch No.: 1

Product Data

Purity	Greater than 95.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.	Source	Escherichia Coli.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	Shipping Condition	Shipped at Room temp.
Synonyms	Interleukin-21; IL-21; I121.		
Amino Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Met-His-Lys-Ser-Ser.		
Solubility	It is recommended to reconstitute the lyophilized Mouse IL21 in sterile 18MΩ-cm H ₂ O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	Mouse IL-21 was lyophilized from 20mM NaHCO ₃ , pH 8.5.		

Introduction

IL-21 is produced by CD4+ T cells in response to antigenic stimulation. Its action enhances antigen-specific responses of immune cells. The biological effects of IL-21 include induction of differentiation of T-cells-stimulated B-cells into plasma cells and memory B-cells, stimulation (in conjunction) with IL-4 of IgG production, and induction of apoptotic effects in naive B-cells and stimulated B-cells in the absence of T-cell signaling. Additionally, IL-21 promotes the anti-tumor activity of CD8+ T-cells and NK cells. IL-21 exerts its effect through binding to a specific type I cytokine receptor, IL-21R, which also contains the gamma chain (γ) found in other cytokine receptors including IL-2, IL-4, IL-7, IL-9 and IL-15. The IL-21/IL-21R interaction triggers a cascade of events which includes activation of the tyrosine kinases JAK1 and JAK3, followed by activation of the transcription factors STAT1 and STAT3.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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Biological Activity

The ED50=10 -50 ng/ml, determined by the cell proliferation assay of modified Ba/F3 cells.

Stability

Lyophilized Mouse IL-21 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution Mouse IL21 should be stored at 4°C between 2-7 days and for future use below -18°C . For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Background

Interleukin-21 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 130 amino acids and having a total molecular mass of 15kDa. The Murine IL-21 is purified by proprietary chromatographic techniques.

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