
Product Data Sheet

Product Name: IL 21 Rat
 Cat. No.: GP20618
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	Interleukin-21; IL-21; IL21.		
Amino Acid Sequence	HKSSPQRPDH LLIRLRHLMD IVEQLKIYEN DLDPELLTAP QDVKGQCEHE AFACFQKAKL KPSNTGNNKT FINDLLAQLR RRLPAKRTGN KQRHMAKPCS CDLYEKKTPK EFLERLKWLL QKMIHQHLS.		
Solubility	It is recommended to reconstitute the lyophilized Rat IL21 in sterile 18M-cm H ₂ O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	RatIL-21 was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.		

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.

Biological Activity

The biological activity is measured by its ability to proliferate activated B cells.

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

Product Data Sheet

Stability

Lyophilized Rat IL-21 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution Rat 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 Rat Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 129 amino acids and having a total molecular mass of 15.2kDa. The Rat IL-21 is purified by proprietary chromatographic techniques.

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