

Datasheet**Interleukin 21****Human Recombinant**

Product	Description	Catalogue-No.	Size
IL-21	Interleukin 21, human recombinant	CB-2121010	10 µg

Product description

Synonyms: IL21, Za11.

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 (°C) 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.

IL-21 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 132 amino acids and having a total molecular mass of 15.4kDa.

The IL-21 is purified by proprietary chromatographic techniques.

Solubility and storage conditions

It is recommended to reconstitute the lyophilized Interleukin-21 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Lyophilized Interleukin-21 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-21 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.

Composition

Lyophilized from PBS, pH 7.4.

Purity: Greater than 97.0% as determined by SDS-PAGE.

Amino acid sequence: MQDRHMIRMRLQLIDIVDQLKNYVNDLVPEFLPAPEDVETNCEWSAFSCFQKAQLKSANTGNNERIINVSINKLKRKPPSTNAGRRQKHRLTCPSCDSYEKKPKKEFLERFKSLLQKMIHQHLSSRTHGSEDS.

Biological activity: Measured by its ability to proliferate activated B cells.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

FOR RESEARCH USE ONLY! Not approved for human or animal diagnostic or therapeutic procedures.