



User Manual

Interleukin-22 (IL-22) (Human)

Cat. No. HEILP-22011

Description:

Interleukin-22 (IL-22) is a member of the IL-10 family of regulatory cytokines which includes IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26. Members of this family share partial homology in their amino acid sequences, but they are dissimilar in their biological functions. Produced by T lymphocytes, IL-22 inhibits IL-4 production by Th2 cells, and induces acute phase reactants in the liver and pancreas. IL-22 signals through a receptor system consisting of IL-10R- β /CRF2-4 and IL-22R, both of which are members of the class II cytokine-receptor family.

Source:

Escherichia coli

Unit:

2 μ g

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $< -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 5.0.

Storage:

This lyophilized preparation is stable at 2-8 $^{\circ}\text{C}$, but should be kept at -20 $^{\circ}\text{C}$ for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 $^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working

aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Molecular Weight:

Approximately 16.9 kDa, non-disulfide-linked homodimeric protein containing of two 147 amino acid polypeptide chains.

Endotoxin:

Less than 1 EU/μg of IL-22 as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by inducing IL-10 secretion of human COLO 205 cells is less than 0.3 ng/mL, corresponding to a specific activity of $> 3.3 \times 10^6$ IU/mg.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

MAPISSHCR LDKSNFQQPYI TNRTFMLAKE ASLADNNTDV RLIGEKLFHG
VSMSERCYLM KQVLNFTLEE VLFPQSDRFQ PYMQEVVPFL ARLSNRLSTC
HIEGDDLHIQ RNVQKLKDTV KKLGESGEIK AIGELDLLFM SLRNACI

Purity:

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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