

# Recombinant Human Interleukin-22 (IL-22)

## Certificate of Analysis and Data Sheet

➤ <b>Source:</b> E.Coli	➤ <b>Catalog No.</b> CTK-328
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### ➤ **Description :**

Recombinant Human IL-22 produced in E.Coli is a non-disulfide-linked homodimeric , non-glycosylated polypeptide chain containing 2 x 146 amino acids and having a total molecular mass of 33,607 Dalton.

rHuIL-22 is purified by proprietary chromatographic techniques.

### ➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### ➤ **Formulation:**

Each mg contains 42% mannitol and 31% HSA.

### ➤ **Solubility:**

It is recommended to reconstitute the lyophilized rHuIL-22 in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### ➤ **Stability:**

Lyophilized rHuIL-22 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rHuIL-22 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 avoid freeze-thaw cycles.**

### ➤ **Purity:**

Greater than 97.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained.

➤ **Amino-Acid Sequence :**

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Pro-Ile-Ser.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Biological Activity:**

This rHuIL-22 is fully biologically active when compared to standard. The Biological Activity was determined by the ability to activate STAT following receptor ligand interaction.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of Recombinant Interleukin-22.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm.
2. Analysis by RP-HPLC, using a calibrated solution of Recombinant Interleukin-22 as a Reference Standard.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.