

## IL-22, Human

**Cat. No.:** Z02716-1

**Size:** 1.0 mg

**Synonyms:** Interleukin-22 (IL-22), Human;

### Description:

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.

### Amino Acid Sequence:

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00001 MAPISSHCRL DKSINFQPPYI TNRTFMLAKE ASLADNNTDV
00041 RLIGEKLFHG VMSERCYLM KQLNFTLEE VLFQSDRFQ
00081 PYMQEVVFFL ARLSNRLSTC HIEGDDLHIQ RNVQKLKDTV
00121 KKLGESGEIK AIGELDLLFM SLRNACI
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**Source:** *E. coli*

**Species:** Human

**Biological Activity:** Fully biologically active when compared to standard. The ED<sub>50</sub> as 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 × 10<sup>6</sup> IU/mg.

**Molecular Weight:** Approximately 33.6 kDa, non-disulfide-linked homodimeric protein containing of two 147 amino acid polypeptide chains.

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

**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**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 °C. Further dilutions should be made in appropriate buffered solutions.

**Purity:** > 97 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level:** Less than 1 EU/μg of rHuIL-22 as determined by LAL method.

**Storage:** This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.