

IL-22, Human

Cat. No.: Z02716-10

Size: 10.0 ug

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:

```
00001 MAPISSHCRL DKSNFQPPYI TNRTFMLAKE ASLADNNTDV
00041 RLIGEKLFHG VMSERCYLM KQLNFTLEE VLFPPQSDRFQ
00081 PYMQEVVPPF ARLSNRLSTC HIEGDDLHIQ RNVQKLKDTV
00121 KKLGESGEIK AIGELDLLFM SLRNACI
```

Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ 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 × 10⁶ 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.