

DATASHEET
Version 20181206**IL-22, Human****Cat. No.:** Z03243-10**Size:** 10.0 ug**Synonyms:** IL-TIF, IL-22, Interleukin-22**Description:**

Interleukin-22 (IL-22) belongs to a group of cytokines called the IL-10 family or IL-10 superfamily (including IL-19, IL-20, IL-24, and IL-26) which are a class of potent mediators of cellular inflammatory responses. It shares use of IL-10R2 in cell signaling with other members of this family, such as IL-10, IL-26, IL-28A/B and IL-29. IL-22 is produced by activated DC and T cells and initiates innate immune responses against bacterial pathogens in epithelial cells such as those in the lung and gut. IL-22 along with IL-17 is produced by splenic LTI-like cells and Th17 cells and likely plays a role in the coordinated response of both adaptive and innate immune systems. 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.

Recombinant human Interleukin-22 (IL-22) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 147 amino acids. A fully biologically active molecule, rhIL-22 has a molecular mass of 16.9 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001  MAPISSHCRL DKSNFQQPYI TNRTFMLAKE ASLADNNTDV
00041  RLIGEKLFHG VMSERCYLM KQVLNFTLEE VLFQSDRFQ
00081  PYMQEVVFL ARLSNRLSTC HIEGDDLHIQ RNVQKLKDTV
00121  KKLGESGEIK AIGELDLLFM SLRNACI
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Source: *E. coli***Species:** Human

Biological Activity: Measured by its ability to induce IL-10 secretion in COLO 205 (human colon carcinoma cells). The ED₅₀ for this effect is less than 1 ng/ml.

Molecular Weight: 16.9 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 98% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human Interleukin-22 (IL-22) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, human Interleukin-22 (IL-22) should be stable up to 1 week at 4°C or up to 2 months at -20°C.