

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-22, Human

Catalog Number: BK0100-10µg

Source: Escherichia coli.

Quantity: 10µg

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 L_{Ti}-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.

Molecular Weight:

16.9 kDa, observed by reducing SDS-PAGE.

Purity:

> 98% as analyzed by SDS-PAGE.

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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MAPISSHCRLDKSNFQQPYITNRT-
FMLAKEASLADNNTDVRDIGEKLF-
HGVSMSERCYLMKQVLNFTLEEVLPQS-
DRFQPYMQEVVPFLARLS-
NRLSTCHIEGDDLHIQRNVQKLKDTVKKLGESG
EIKAI GELDLLFMSLRNACI

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant human Interleukin-22 (IL-22) remains stable up to 6 months at -80 °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.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.