

Interleukin-22, rat recombinant (rrIL-22)

Catalog No: 97593 Lot No: XXXXX Source: *E. coli*

Synonyms: IL-TIF, TIFa, IL-10-related T-cell-derived-inducible factor, IL-22, ILTIF, IL-D110, zcyto18, MGC79382,

MGC79384, TIFIL-23

Background

IL-22 is a member of the IL-10 family of regulatory cytokines. 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-beta/CRF2-4 and IL-22R, both of which are members of the class II cytokine-receptor family.

Description

Interleukin-22 rat recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 146 amino acids and having a molecular mass of 16.6 kDa. IL-22 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in 1xPBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized Interleukin -22 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-22, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL22 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freezethaw cycles.

Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

LPINSQCKLE AANFQQPYIV NRTFMLAKEA SLADNNTDVR LIGEELFRGV KAKDQCYLMK QVLNFTLEDV LLPQSDRFQP YMQEVVPFLT KLSIHLSPCH ISGDDQNIQK NVRQLKETVQ KLGESGEIKA IGELDLLFMS LRNACV

Activity

The biological activity is measured by its ability to induce IL-10 secretion in COLO 205 (human colon carcinoma cells). The expected ED50 for this effect is 0.15 - 0.75 ng/ml.





Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.