

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-22, Mouse

Catalog Number: BK0101-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Interleukin-22 (IL-22) is a member of a group of cytokines called the IL-10 family which include IL-10, IL-19, IL-20, IL-24, and IL-26. IL-22 shares use of the IL-10R2 in cell signaling with other members of this family. 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. IL-22 is produced by activated DCs and T cells and initiates an innate immune response against bacterial pathogens especially in epithelial cells such as those in the respiratory tract and gut. IL-22 along with IL-17 is rapidly produced by splenic L_{Ti}-like cells and can also be produced by Th17 cells, which plays a likely role in the coordinated response of both adaptive and innate immune systems. Recombinant Mouse IL-22 produced in E. coli is a single non-glycosylated polypeptide chain containing 147 amino acids. A fully biologically active molecule, rmIL-22 has a molecular mass of 16.8 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Molecular Weight:

16.8 kDa, observed by reducing SDS-PAGE

Purity:

> 98% as analyzed by SDS-PAGE & HPLC.

Biological Activity:

ED₅₀ < 0.5 ng/ml. Measured by its ability to induce IL-10 secretion in COLO 205 (human colon carcinoma cells).

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MLPVNTRCKLEVSNFQQPYYIVNRT-
FMLAKEASLADNNTDVRLLIGEKLFGRG
VSAKDQCYLKQVNLNFTLEDVLLPQS-
DRFQPYMQEVVFPFLTKLSNQLSSC
HISGDDQNIQKNVRRLLKETVKKLGESEIKAI-
GELDLLFMSLRNACV

Endotoxin:

< 0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant Mouse IL-22 remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, Mouse IL-22 should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

Usage:

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