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# IL 22 Mouse, PEG

Description: Pegylated Interleukin-22 Mouse Recombinant produced in E.Coli is a single, non-glycosylated homodimeric polypeptide chain containing 147 amino acids and an aditional Ala amino acid at N-terminus having a molecular mass of 36 kDa as determioned by mass spectometry. However due to enlarged hydrodymanic volume it runs on the SDS-PAGE as a 50 kDa protein and in gel-filtration on Superdex 200 as over 200 kDa protein. The Murine IL-22 is Mono-pegylated (with 20 kDa PEG) purified by proprietary chromatographic techniques.

Synonyms: IL-TIF, TIFa, IL-10-related T-cell-derived-inducible factor, IL-22, ILTIF, IL-D110, zcyto18, MGC79382, MGC79384, TIFIL-23.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Purity: Greater than 98.0% as determined by: (a) Analysis by Gel-Filtration. (b) Analysis by SDS-PAGE.

#### Formulation:

Lyophilized from a concentrated solution at 0.65mg/ml containing 0.003mM NaHCO3.

#### Stability:

Lyophilized pegylated murine IL22 although stable at room temperature for several days, should be stored desiccated below -20C. Upon reconstitution at 0.1mg/ml pegylated mouse IL22 and up to 2mg/ml, filter and sterilized, the protein can be stored at 4 degrees Celsius for several weeks making it suitable for long term infusion studies using osmotic pumps. At lower concentration addition of a carrier protein (0.1% HSA or BSA) is suggested. Please prevent freeze-thaw cycles.

## Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

### Solubility:

It is recommended to reconstitute the lyophilized pegylated mouse Interleukin -22 in sterile 0.4% NaHCO3 adjusted to pH 8-9 not less than 100

## Introduction:

Interleukin-22 (IL-22), also known as IL-10-related T cell-derived inducible factor (IL-TIF) was initially identified as a gene induced by IL-9 in mouse T cells and mast cells. Mouse IL-22 cDNA encodes a 179 amino acid residue protein with a putative 33 amino acids signal peptide that is cleaved to generate a 147 aa mature protein that shares approximately 79% and 22% aa sequence identity with human IL-22 and IL-10, respectively. IL-22 has been shown to activate STAT-1 and STAT-3 in several hepatoma cell lines and upregulate the production of acute phase proteins. IL-22 is produced by normal mouse T cells upon Con A activation. Mouse IL-22 expression is also induced in various organs upon lipopolysaccharide injection, suggesting that IL-22 may be involved in inflammatory responses. The functional IL-22 receptor complex consists of two receptor subunits, IL-22R (previously an orphan receptor named CRF2-9) and IL-10R (previously known as CRF2-4), belonging to the class II cytokine recep







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# **Biological Activity:**

The ED50 as determined by STAT3 phosphorylation assay in HepG cells. The activity in vitro was

found to be  $\sim$  10% compared to the non-pegylated mouse IL22.

Catalog #:CYPS-708

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