# Recombinant Human Interleukin-22/IL-22 Protein

Catalog Number:PKSH033620



Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

Synonyms Interleukin-22;IL-22;Cytokine Zcyto18;IL-10-related T-cell-derived-inducible

factor;IL-TIF;IL22;IL-D110;IL-TIF;ILTIF;TIFa;TIFIL-23;zcyto18

Species Human
Expression Host E.coli

SequenceAla34-Ile179AccessionQ9GZX6Calculated Molecular Weight17.8 kDaObserved molecular weight17 kDaTagC-His

**Bioactivity** Measure by its ability to induce proliferation in A549 cells. The  $ED_{50}$  for this effect

is < 0.5 ng/mL.

## **Properties**

**Purity** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin** < 0.1 EU per µg of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS,pH 8.0.

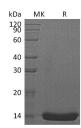
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

#### Data



> 98 % as determined by reducing SDS-PAGE.

### **Background**

Interleukin-22(IL-22) is a member of a group of the IL-10 family; a class of potent mediators of cellular inflammatory responses. IL-22 is produced by activated DC and T cells. IL-22 and IL-10 receptor chains play a role in cellular targeting and signal transduction. It can initiate and regulate innate immune responses against bacterial pathogens especially in epithelial cells such as respiratory and gut epithelial cells. IL-22 along with IL-17 likely plays a role in the coordinated response of both adaptive and innate immune systems. IL-22 also promotes hepatocyte survival in the liver and epithelial

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cells in the lung and gut similar to IL-10. Biological activity of IL-22 is initiated by binding to a cell-surface complex consisting of IL-22R1 and IL-10R2 receptor chains. IL-22 biological activity is further regulated by interactions with a soluble binding protein; IL-22BP. IL-22BP and an extracellular region of IL-22R1 share sequence similarity. In some cases; the pro-inflammatory versus tissue-protective functions of IL-22 are regulated by cytokine IL-17A.

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