

Recombinant Human Interleukin-22/IL-22 Protein

Catalog Number: PKSH033620

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

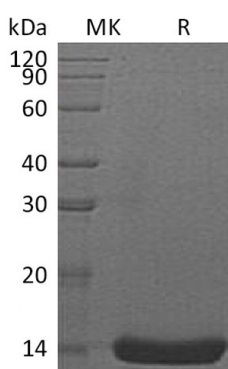
Description

Species	Human
Source	E.coli-derived Human IL-22 protein Ala34-Ile179, with an C-terminal His
Calculated MW	17.8 kDa
Observed MW	17 kDa
Accession	Q9GZX6
Bio-activity	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% Tween 80 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

For Research Use Only

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 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.