

## Recombinant Human IL-22

## Information

Gene ID	50616
Accession #	Q9GZX6
Alternate Names	Interleukin-22, Cytokine Zcyto18; IL-10-related T-cell-derived-inducible factor; IL-TIF
Source	Escherichia coli.
M.Wt	Approximately 33.6 kDa, non-disulfide-linked homodimeric protein containing of two 147 amino acid polypeptide chains.
AA Sequence	MAPISSHCRL DKSNFQQPYI TNRTFMLAKE ASLADNNTDV RLIGEKLFHG VSMSERCYLM KQVLNFTLEE VLFPQSDRFQ PYMQEVVPFL ARLSNRLSTC HIEGDDLHIQ RNVQKLKDTV KKLGESGEIK AIGELDLLFM SLRNACI
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  - 12 months from date of receipt, -20 to -70°C as supplied.  - 1 month, 2 to 8°C under sterile conditions after reconstitution.  - 3 months, -20 to -70°C under sterile conditions after reconstitution.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 5.0.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED50 as determined by inducing IL-10 secretion of human COLO 205 cells is less than 0.3 ng/ml, corresponding to a specific activity of > 3.3×10 <sup>6</sup> IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

### Components and Storage

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Components	10 µg	100 µg	500 μg	
Recombinant Human IL-22	10 μg	100 µg	500 µg	

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#### Quality Control

Purity	>97% by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/µg of rHulL-22 as determined by LAL method.

#### Description

IL-22 is belonging to IL-10 family of regulatory cytokines which includes IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26. Members of this family share partial homology in their amino acid sequences, but they are dissimilar in their biological functions. Produced by T lymphocytes and dendritic cells, IL-10 contributes to the inflammatory response in vivo. IL-22 signals through CRF2-4 and IL-22. It along with IL-17 is rapidly produced by splenic LTi-like cells and can be also produced by Th17 cells and likely plays a role in the coordinated response of both adaptive and innate immune systems.

#### Reference

- 1. Zeng G, Chen CY, Huang D, et al. 2011. J Immunol, 187: 190-9.
- 2. Cocco CandAiroldi I. 2012. Immunotherapy, 4: 668.
- 3. Honda K. 2012. Immunity, 37: 952-4.
- 4. Gurney AL. 2004. Int Immunopharmacol, 4: 669-77.





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