Recombinant Human IL-22

Catalog # FL131

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/μg of rHuIL-22 protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	Tag free.
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 ≥ 3.3×10^6 IU/mg.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, with 150 mM NaCl, pH 5.0.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a 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.
Accession #	Q9GZX6 Ala34-Ile179
Amino acid sequence	MAPISSHCRLDKSNFQQPYITNRTFMLAKEASLADNNTDVRLIGEKLFHGVSMSERCYLMKQVLNFTLEEVLFPQSDRFQPY MQEVVPFLARLSNRLSTCHIEGDDLHIQRNVQKLKDTVKKLGESGEIKAIGELDLLFMSLRNACI
Molecular weight	Approximately 33.6 kDa, a non-disulfide-linked, homodimeric protein consisting of two 147 amino acid polypeptide chains.
Synonyms	nterleukin-22, IL-TIF, Cytokine ZCYTO18
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 36 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.
Precautions	Recombinant Human IL-22 is for research use only and not for use in diagnostic or therapeutic procedures.

Background

IL-22 is a member of the 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. The human IL-22 gene is localized to chromosome 12q15. 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 T cells upon anti-CD3 stimulation in humans. The functional IL-22 receptor complex consists of two receptor subunits, IL-22R (previously an orphan receptor named CRF2-9) and IL-10R beta (previously known as CRF2-4) , belonging to the class II cytokine receptor family. Mature human IL-22 protein shares approximately 79% aa sequence identity with mouse IL-22. Recombinant Human IL-22 is a 33.6kDa, non-disulfide-linked, homodimeric protein consisting of two 147 amino acid polypeptide chains.

Validation Images