Recombinant Human Interleukin-22 (rh IL-22)

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

Introduction: IL-22 is a member of the IL-10 family of regulatory cytokines.Members of this family share partial homology in their amino acid sequences, but they are dissimilar in their biological functions. Produced by T lymphocytes IL-22 inhibits IL-4 production by Th2 cells and induces acute phase reactants in the liver and pancreas. IL-22 signals through a receptor system consisting of IL-10R-beta/CRF2-4 and IL-22R, both of which are members of the class II cytokine-receptor family.

Description: Recombinant human IL-22 produced in E.Coli is a single, non-glycosylated, homodimeric polypeptide chain containing 2x146 amino acids and having a molecular mass of 33.6 kDa. Rh IL-22 is purified by proprietary chromatographic techniques.

Source: Escherichia Coli

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in 25 mM Sodiumphosphate, 200 mM NaCl, pH 6.0 The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-22 in sterile water not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-22 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IL-22 should be stored at 4°C between 2-7days, for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by SDS-PAGE.

Endotoxicity: The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method

Amino acid sequence: MAPISSHCRL DKSNFQQPYI TNRTFMLAKE ASLADNNTDV RLIGEKLFHG VSMSERCYLM KQVLNFTLEE VLFPQSDRFQ PYMQEVVPFL ARLSNRLSTC HIEGDDLHIQ RNVQKLKDTV KKLGESGEIK AIGELDLLFM SLRNACI

Biological Activity: The biological activity was determined by the ability to activiate STAT following receptor ligand interaction.

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small	2 µg	Cat.N°	11340222
medium	10 µg	Cat.N°	11340223
large	50 µg	Cat.N°	11340225
x-large	250 µg	Cat.N°	11340227
xx-large	1000 µg	Cat.N°	11340228

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