

32-1496: mL 22 PEG Recombinant Protein

Alternative Name : IL-TIF,TIFa,IL-10-related T-cell-derived-inducible factor,IL-22,ILTIF,IL-D110,zcyto18,MGC79382,MGC79384,TIFIL-23.

Description

Source : Escherichia Coli. Pegylated Interleukin-22 Mouse Recombinant produced in E.Coli is a single, non-glycosylated homodimeric polypeptide chain containing 147 amino acids and an additional Ala amino acid at N-terminus having a molecular mass of 36 kDa as determined by mass spectrometry. However due to enlarged hydrodynamic volume it runs on the SDS-PAGE as a 50 kDa protein and in gel-filtration on Superdex 200 as over 200 kDa protein. The Murine IL-22 is Mono-pegylated (with 20 kDa PEG) purified by proprietary chromatographic techniques. Interleukin-22 (IL-22), also known as IL-10-related T cell-derived inducible factor (IL-TIF) was initially identified as a gene induced by IL-9 in mouse T cells and mast cells. Mouse IL-22 cDNA encodes a 179 amino acid residue protein with a putative 33 amino acids signal peptide that is cleaved to generate a 147 aa mature protein that shares approximately 79% and 22% aa sequence identity with human IL-22 and IL-10, respectively. 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 mouse T cells upon Con A activation. Mouse IL-22 expression is also induced in various organs upon lipopolysaccharide injection, suggesting that IL-22 may be involved in inflammatory responses. 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

Product Info

Amount : 10 µg
Purification : Greater than 98.0% as determined by: (a) Analysis by Gel-Filtration. (b) Analysis by SDS-PAGE.
Content : Lyophilized from a concentrated solution at 0.65mg/ml containing 0.003mM NaHCO₃.
Storage condition : Lyophilized pegylated murine IL22 although stable at room temperature for several days, should be stored desiccated below -20°C. Upon reconstitution at 0.1mg/ml pegylated mouse IL22 and up to 2mg/ml, filter and sterilized, the protein can be stored at 4 degrees Celsius for several weeks making it suitable for long term infusion studies using osmotic pumps. At lower concentration addition of a carrier protein (0.1% HSA or BSA) is suggested. Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute the lyophilized pegylated mouse Interleukin -22 in sterile 0.4% NaHCO₃ adjusted to pH 8-9 not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED50 as determined by STAT3 phosphorylation assay in HepG cells. The activity in vitro was found to be ~ 10% compared to the non-pegylated mouse IL22.

