

Recombinant Rat Interleukin-22 (rr IL-22)

Interleukin-22 was initially identified as a gene induced by IL-9 in mouse T cells and mast cells. It belongs to the IL-10 related cytokine family that consists of six members (IL-10, IL-19, IL-20, IL-22, IL-24 and IL26). These proteins share structural homology and some degree of amino acid sequence homology to IL-10. Receptors for these proteins are members of the class II cytokine receptor family. Rat IL -22 cDNA predicts a 179 amino acid (aa) residue precursor protein with a putative 33 aa signal peptide that is cleaved to generate a 147 aa mature protein, which shares approximately 92% and 79% aa sequence identity with mouse and human IL-22, respectively. IL-22 signals through a heterodimeric receptor complex composed of the IL-22R (CRF29) subunit and the (chain of IL-10R(CRF24). In addition, IL-22 also binds to a secreted member of the class II cytokine receptor family called IL-22BP that acts as a natural IL-22 antagonist. IL-22 upregulates acute phase reactants in the liver and hepatoma cells. In a rat hepatoma cell line, IL-22 has been shown to activate the Jak/STAT and MAPK signaling pathways. Recombinant rat Interleukin-22 produced in E.Coli is a single polypeptide chain containing 179 amino acids and having a molecular mass of 16.7 kDa.

Synonyms :	IL-TIF, TIFa, IL-10-related T-cell-derived-inducible factor
Source:	<i>Escherichia Coli</i>
Formulation:	Lyophilisate from a 0.22 µm filtered carrier free solution in 25 mM Tris, pH 8.0 + 200 mM NaCl
Reconstitution:	Reconstitute in sterile endotoxin free water not less than 100 µg/ml
Stability:	The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rr IL-22 is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.
Biological Activity:	testing in progress
Purity:	95% (verified by SDS-PAGE / silver stain)
Endotoxicity:	The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method
Order N°:	rr IL-22+Size available sizes: 2 µg, 10 µg, 50 µg

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