

## **Growth Factor Data Sheet**

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Interleukin-13 (IL13) is expressed by the IL13 gene and secreted by many cell types, especially helper T-cells type 2 (Th2). The high solution form of IL13 is reported to be a monomer with two internal disulfide bonds that contribute to a bundled four  $\alpha$ -helix configuration. Targeted deletion of IL13 in mice resulted in impaired Th2-cell development, and indicated an important role for IL13 in the expulsion of gastrointestinal parasites. IL13 exerts anti-inflammatory effects on monocytes and macrophages and inhibits the expression of inflammatory cytokines such as IL1 $\beta$ , TNF- $\alpha$ , IL6 and IL8. IL13 has also been shown to enhance B cell proliferation, and to induce isotype switching that results in an increased production of IgE. Mature rat IL13 shares 60%, 76%, and 60% amino acid sequence identity with human, mouse, and rhesus IL13, respectively.

Catalog Number Product Name	1510-13B IL13, Rat (113 a.a.) Recombinant Rat Interleukin-13 IL13 Interleukin 13
Source	Escherichia coli
MW	~12.3 kDa (113 amino acids)
Sequence	TPGPVRRSTS PPVALRELIE ELSNITQDQK TSLCNSSMVW SVDLTAGGFC AALESLTNIS SCNAIHRTQR ILNGLCNQKA SDVASSPPDT KIEVAQFISK LLNYSKQLFR YGH
Accession Number	<u>P42203</u>
Purity	>98% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED $_{50}$ as determined by a cell proliferation assay using human TF-1 cells is less than 5 ng/ml, corresponding to a specific activity of >2.0 × 10 $^{5}$ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.

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