

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Human interleukin-13 (IL13) is expressed by the IL13 gene located on chromosome 5 and is secreted by many cell types, especially T-helper type 2 (Th2) cells. The high solution form of IL13 is reported to be a monomer with two internal disulfide bonds that contribute to a bundled four F-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 can also inhibit the expression of inflammatory cytokines such as IL1beta, TNF-alpha, IL6 and IL8. IL13 has also been shown to enhance B-cell proliferation, as well as induce isotype switching, which results in an increased production of IgE. Human, mouse and rat IL13 share a low percentage of homology, but have cross species activity.

Catalog Number	1110-13
Product Name	IL13, Human Recombinant Human Interleukin-13 IL13 Interleukin 13
Source	<i>Escherichia coli</i>
MW	~12.5 kDa (112 amino acids)
Sequence	GPVPPSTALR ELIEELVNIT QNQKAPLCNG SMVWSINLTA GMYCAALES LINVSGCSAIE KTQRMLSGFC PHKVSAGQFS SLHVRDTKIE VAQFVKDLLL HLKCLFREGR FN
Accession Number	P35225
Purity	>97% 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 1 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁶ 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.