

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 the chromosome 5. IL13 is a 112 amino acid protein containing a proposed 20 amino acid signal peptide making it 132 amino acids total, and shares approximately 30% amino acid sequence homology to human IL4. Additionally, the two cytokines exhibit overlapping biological activities. Human IL13 is produced by activated Th0, Th1-like Th2-like and CD8 T-cells. Similarly, to IL4, IL13 has multiple effects on the differentiation of monocytes/macrophages, and can suppress their cytotoxic functions.

IL13 variant is a natural variant of the wild-type IL13 as it has a Q110 (glutamine) instead of an R110 (arginine), which is associated with increased risk for asthma development. At homozygosity, IL13V is associated with higher levels of total serum IgE in some allergic rhinitis patients.

Catalog Number	1110-13V
Product Name	IL13, Human (Variant) Recombinant Human Interleukin-13V IL13V Interleukin 13 Variant
Source	<i>Escherichia coli</i>
MW	~12.3 kDa (112 amino acids)
Sequence	GPVPPSTALR ELIEELVNIT QNQKAPLCNG SMVWSINLTA GMYCAALES L INVS GCSAIE 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.