

Growth Factor Data Sheet

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

The *IL5* gene is located on chromosome 5 in humans, in close proximity to the genes encoding IL3, IL4, and granulocyte-macrophage colony-stimulating factor (CSF2), which are often co-expressed in TH2 cells. Through binding to the IL5 receptor, IL5 stimulates B cell growth and increases immunoglobulin secretion and is also a key mediator in eosinophil activation. Interleukin 5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma. Human IL5 is 115 amino acids long (murine IL5 has 133 amino acids) and is a TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely IL3 and CSF2), this glycoprotein is a homodimer in its active form.

Catalog Number Product Name	1110-05 IL5, Human Recombinant Human Interleukin 5 Colony-Stimulating Factor, eosinophil Eosinophil Differentiation Factor, EDF T-cell Replacing Factor, TRF
Source	<i>Escherichia coli</i>
MW	~26.5 kDa (2x 116 amino acids)
Sequence	MIPTIPTSA LVKETLALLS THRTLLIANE TLRIPVPVHK NHQLCTEEIF QGIGTLESQT VQGGTVERLF KNLSLIKKYI DGQKKKCGEE RRRVNQFLDY LQEFLGVMNT EWIIES
Accession Number	P05113
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 0.1 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁷ 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.