

## **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 11 in mice, 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. Murine IL5 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	1310-05
Product Name	IL5, Murine
	Recombinant Murine Interleukin 5
	Colony-Stimulating Factor, eosinophil
	Eosinophil Differentiation Factor, EDF
	T-cell replacing factor, TRF
Source	Escherichia coli
MW	~26.2 kDa (2x 113 amino acids)
Sequence	MEIPMSTVVK ETLTQLSAHR ALLTSNETMR LPVPTHKNHQ LCIGEIFQGL DILKNQTVRG
	GTVEMLFQNL SLIKKYIDRQ KEKCGEERRR TRQFLDYLQE FLGVMSTEWA MEG
Accession Number	<u>P04401</u>
Purity	>98% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell
	proliferation assay using human TF-1 cells is less than 2 ng/ml, corresponding to a
	specific activity of $> 5.0 \times 10^5$ 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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