Growth Factor Data Sheet

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

Human interleukin-17A (IL17A) is encoded by the IL17A gene located on chromosome 6, and belongs to the IL17 family that contains IL17A, IL17B, IL17C, IL17D, IL17E and IL17F. All of the members of the IL17 family have a similar protein structure, which includes four highly conserved cysteine residues that are critical to their 3 dimensional shape. Both recombinant and natural IL17 have been shown to exist as disulfide linked homodimers, and mature IL17 contains one potential N-linked glycosylation site. At the amino acid level, IL17 exhibits 63% amino acid identity with mouse IL17. However, there is no reported sequence similarity to any other known cytokines. IL17 is a T-cell expressed pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of the herpesvirus, Saimiri. High levels of human IL17 were induced from primary peripheral blood CD4+ T-cells upon stimulation, which can induce stromal cells to produce proinflammatory and hematopoietic cytokines.

Catalog Number **Product Name**	**1110-17** **IL17A, Human** Recombinant Human Interleukin-17 IL17, IL17A Interleukin 17A Cytotoxic T-Lymphocyte-Associated Serine Esterase 8 (CTLA8)
Source	*Escherichia coli*
MW	~31.0 kDa (homodimer of two 132 amino acid chains)
Sequence	GITIPRNPGC PNSEDKNFPR TVMVNLNIHN RNTNTNPKRS SDYYNRSTSP WNLHRNEDPE RYPSVIWEAK CRHLGCINAD GNVDYHMNSV PIQQEILVLR REPPHCPNSF RLEKILVSVG CTCVTPIVHH VA
Accession Number	Q16552
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED_{50} as determined by inducing IL-6 secretion of murine NIH/3T3 cells is less than 7.5 ng/ml, corresponding to a specific activity of $>1.3 \times 10^5$ 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.