

Growth Factor Data Sheet

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

Interleukin-1 alpha (IL1A) is a nonsecreted pro-inflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells and endothelial cells. It possesses metabolic, physiological, hematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL1A and IL-1B bind to the same receptor and have similar biological properties. Among various species, the amino acid sequence of mature IL1A is conserved 60% to 70% and human IL1A has been found to be biologically active with murine cell lines.

Catalog Number	1110-01A
Product Name	IL1A (IL-1 alpha), Human Recombinant Human Interleukin-1 α HuIL1A Interleukin 1 α IL1 α
Source	<i>Escherichia coli</i>
MW	~18.0 kDa (159 amino acids)
Sequence	SAPFSFLSNV KYNFMRIKY EFILNDALNQ SIIRANDQYL TAAALHNLDE AVKFDMGAYK SSKDDAKITV ILRISKTKLY VTAQDEDQPV LLKEMPEIPK TITGSETNLL FFWETHGTKN YFTSVAHPNL FIATKQDYWV CLAGGPPSIT DFQILENQA
Accession Number	P01583
Purity	>97% 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 murine D10S cells is less than 1.0 pg/ml, corresponding to a specific activity of $>1.0 \times 10^9$ 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.