

Growth Factor Data Sheet

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

Interleukin-8 (IL8) is encoded by the IL8 gene and produced by macrophages and other cell types such as epithelial cells. IL8 is synthesized by endothelial cells, which stock IL8 in their storage vesicles. There are many receptors capable of binding to IL8; however, the molecules with the highest affinity to IL8 are receptors CXCR1 and CXCR2. As a member of the CXC chemokine family, one of the functions of IL8 is the induction of chemotaxis in its target cells, like neutrophil granulocytes, basophils, and T-cells. IL8 (72a.a.) has a 5-10-fold higher activity on neutrophil activation compared to IL8 (77 a.a.). IL8 is often associated with inflammation, and has been cited as a pro-inflammatory mediator in gingivitis and psoriasis.

Catalog Number	1110-08A
Product Name	IL8, Human Recombinant Human Interleukin-8, 72 a.a. HuIL8 Chemokine, CXC Motif, Ligand 8 (CXCL8) Monocyte-Derived Neutrophil Chemotactic Factor Small Inducible Cytokine Subfamily B, Member (SCYB8)
Source	<i>Escherichia coli</i>
MW	~8.4 kDa (72 amino acids)
Sequence	SAKELRCQCI KTYSKPFHPK FIKELRVIES GPHCANTEII VKLSDGRELC LDPKENWVQR VVEKFLKRAE NS
Accession Number	P10145
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a chemotaxis bioassay using human CXCR2 transfected mouse BaF3 cells is less than 2 ng/ml, corresponding to a specific activity of >5.0 × 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.