



## User Manual

**Interleukin-8 (77a.a.) (IL-8 (77a.a.)) (Human)**

**Cat. No. HEILP-08023**

**Description:**

Interleukin-8 (IL-8) is encoded by the IL8 gene and produced by macrophages and other cell types such as epithelial cells. It is also synthesized by endothelial cells, which store IL-8 in their storage vesicles. There are many receptors capable to bind IL-8, the most affinity to IL-8 are receptors CXCR1, and CXCR2. As a member of the CXC chemokine family, function of IL-8 is the induction of chemotaxis in its target cells, like neutrophil granulocytes, basophils, and T-cells. IL-8 (72a.a.) has a 5-10 fold higher activity on neutrophil activation, compared to IL-8 (77a.a.). IL-8 is often associated with inflammation, it has been cited as a proinflammatory mediator in gingivitis and psoriasis

**Source:**

*Escherichia coli*

**Unit:**

1 mg

**Reconstitution:**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

**Formulation:**

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Storage:**

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

**Molecular Weight:**

Approximately 8.9 kDa, a single, non-glycosylated polypeptide chain containing 77 amino acids.

**Endotoxin:**

Less than 1 EU/ $\mu$ g of IL-8 (77a.a.) as determined by LAL method.

**Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

**Biological Activity:**

The biologically active determined by a chemotaxis bioassay using human peripheral blood neutrophils is in a concentration range of 25-150 ng/mL.

**Physical Appearance:**

Sterile filtered white lyophilized (freeze-dried) powder.

**AA Sequence:**

AVLPRSAKEL RCQCIKTYSK PFHPKFIKEL RVIESGPHCA NTEIIVKLSG GRELCLDPKE  
NWWQRVVEKF LKRAENS

**Purity:**

> 96% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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