

# Recombinant Human Interleukin-8 (IL-8/CXCL8)

## Certificate of Analysis and Data Sheet

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| ➤ <b>Source:</b><br>E.Coli | ➤ <b>Catalog No.</b><br>CHM-327 |
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### ➤ **Description :**

Recombinant Human IL-8 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 77 amino acids and having a molecular mass of 8904 Dalton.

Recombinant IL-8 is purified by proprietary chromatographic techniques.

### ➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### ➤ **Formulation:**

Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

### ➤ **Solubility:**

It is recommended to reconstitute the lyophilized hIL-8 in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### ➤ **Stability:**

Lyophilized Interleukin-8 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rhIL-8 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please avoid freeze-thaw cycles.**

### ➤ **Purity:**

Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Anion-exchange FPLC.

(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Amino acid sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Ala-Lys-Glu-Leu.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Biological Activity:**

This rHuIL-8 is fully biologically active when compared to standard. Specific Activity of IL-8 in chemotaxis of donor PBL neutrophils, threshold concentration corresponding to 25-150 ng/ml.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of IL-8.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.85 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).

2. Analysis by RP-HPLC, using a standard solution of Eotaxin as a Reference Standard.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.