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# **Product Datasheet**

Product Name Recombinant Human Interleukin-8 (1-72 a.a.) (CXCL8)

Cata No CB500031

Source Escherichia Coli.

**Synonyms** IL-8, CXCL8, Monocyte-derived neutrophil chemotactic factor, MDNCF, T-cell

chemotactic factor, Neutrophil-activating protein 1, NAP-1, Protein 3-10C,

Granulocyte chemotactic protein 1, GCP-1, Monocyte-derived neutrophil-activating peptide, MONAP, Emoctakin, K60, NAF, LECT, LUCT, 3-10C, LYNAP, SCYB8,

TSG-1, AMCF-I, b-ENAP.

## **Description**

Interleukin-8 (IL-8) is a chemokine 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, the Weibel-Palade bodies. When first encountering an antigen, the primary cells to encounter it are the macrophages who phagocytose the particle. Upon processing, they release chemokines to signal other immune cells to come in to the site of inflammation. IL-8 is one such chemokine. It serves as a chemical signal that attracts neutrophils at the site of inflammation, and therefore is also known as Neutrophil Chemotactic Factor.

Interleukin-8 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 72 amino acids and having a molecular mass of 8452 Dalton.

The IL-8 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

## **Biological Activity**

Specific Activity of IL8 in chemotaxis of donor PBL neutrophils, threshold concentration corresponding to 10-100 ng/ml.

## **Purity**

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

## **Formulation**

The IL-8 was lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

## **Stability**

Lyophilized Interleukin-8 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL8 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 prevent freeze-thaw cycles.

#### Sequence

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