

Rev04  
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**DATASHEET**

# IL-8/CXCL8 (77aa), Human(CHO-expressed)

Cat. No.: Z03138

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>IL-8 (Ala23-Ser99) Accession # P10145</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 6.0 ng/ml, measured in a calcium flux assay using CHO/Gα15 cells transiently expressing CXCR1.
<b>Expression System</b>	CHO
<b>Apparent Molecular Weight</b>	~9 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 μg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** Interleukin-8 (IL-8), also known as CXCL8, GCP-1 and NAP-1, is one of the first discovered chemokines and belongs to the CXCL family, in which the first two conserved cysteines are separated by one residue. In vivo, IL-8 exists in two forms: a 77 a.a. protein produced by endothelial cells, and the more active 72 a.a. protein produced by monocytes. The receptors for IL-8 are the seven-helical G-protein coupled receptors CXCR1 and CXCR2, exclusively expressed on neutrophils. The functions of IL-8 are to induce rapid changes in cell morphology, activate integrins, and release the granule contents of neutrophils. Thus, IL-8 can enhance the antimicrobial actions of defense cells. It is secreted by monocytes, macrophages and endothelial cells. IL-8 signals through CXCR1 and CXCR2 to chemoattract neutrophils, basophils, and T cells. IL-8 is also a potent promoter of angiogenesis. Other functions of this protein, such as involvement in bronchiolitis pathogenesis, have also been reported.

**Synonyms :** IL8; CXCL8; monocyte-derived neutrophil chemotactic factor; MDNCF; neutrophil activating factor; NAF; NAP-1

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**