

Rev04
 Update: Mar,01,2022

DATASHEET

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

Cat. No.: Z03138

Product Introduction

Species	Human
Protein Construction	IL-8 (Ala23-Ser99) Accession # P10145
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 6.0 ng/ml, measured in a calcium flux assay using CHO/Gα15 cells transiently expressing CXCR1.
Expression System	CHO
Apparent Molecular Weight	~9 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	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 ₂ O or PBS up to 100 μg/ml.
Storage & Stability	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

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