

DATASHEET
Version 20181206**IL-8/CXCL8 (8-79aa), Human****Cat. No.:** Z03061-1**Size:** 1.0 mg

Synonyms: CXCL8, monocyte-derived neutrophil chemotactic factor (MDNCF), neutrophil activating factor (NAF), NAP-1

Description:

Interleukin-8 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: 77 a.a. produced by endothelial cells, and the more active 72 a.a. produced by monocytes. The receptors of 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 cellular shape, activate the integrins, and release the granule contents of neutrophils. Thus, IL-8 can enhance the antimicrobial actions of defense cells.

Recombinant human Interleukin-8/CXCL8 (rhIL-8) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 72 amino acids. A fully biologically active molecule, rhIL-8 has a molecular mass of 8.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 SAKELRCQCI KTYSKPFHPK FIKELRVIES GPHCANTEII
00041 VKLSDGRELC LDPKENWVQR VVEKFLKRAE NS

Source: *E. coli***Species:** Human

Biological Activity: ED₅₀ < 20 ng/mL, measured by the FLIPR assay using CHO cells transfected with human CXCR1, the receptor of human CXCL8, corresponding to a specific activity of > 5×10⁴ units/mg.

Molecular Weight: 8.4 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 µg/mL.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human Interleukin-8/CXCL8 (rhIL-8) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIL-8 remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.