

DATASHEET

Version 20181206

IL-8 (77aa)/CXCL8, Human**Cat. No.:** Z03262-1**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: 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.

Recombinant human Interleukin-8 (IL-8, 77aa)/CXCL8 produced in *E. coli* is a single non-glycosylated polypeptide chain containing 77 amino acids. A fully biologically active molecule, rhIL-8(77aa)/CXCL8 has a molecular mass of 8.9 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 AVLPRSAKEL RCQCIKTYSK PFHPKFIKEL RVIESGPHCA
00041 NTEIVKLSD GRELCDDPKE NWVQRVVEKF LKRAENS

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

Biological Activity: The EC₅₀ value of human IL-8(77aa) on Ca²⁺ mobilization assay in CHO-K1/G15/hCXCR1 cells (human Ga15 and human CXCR1 stably expressed in CHO-K1 cells) is less than 150 ng/ml.

Molecular Weight: 8.9 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

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

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

Storage: Lyophilized recombinant human Interleukin-8 (IL-8)(77aa)/CXCL8 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, recombinant human Interleukin-8 (IL-8)(77aa)/CXCL8 should be stable up to 1 week at 4°C or up to 2 months at -20°C.