

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-8 (77aa)/CXCL8, Human

Catalog Number: BK0110-1mg

Source: Escherichia coli.

Quantity: 1mg

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.

Molecular Weight:

8.9 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE.

Biological Activity:

The EC50 value of human IL-8(77aa) on Ca²⁺ mobilization assay in CHO-K1/G 15/hCXCR1 cells (human Ga15 and human CXCR1 stably expressed in CHO-K1 cells) is less than 150 ng/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

AVLPRSAKELRCQCIK-
TYSKPFHFKFIKELRVIESGPHCANTEIIVKLS-
D-GRELCLDPKENWVQRVVEKFLKRAENS

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μg/ml.

Storage:

Lyophilized recombinant human Interleukin-8 (IL-8)(77aa)/CXCL8 remains stable up to 6 months at -80 °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.

Usage:

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