

Interleukin-8 (1-77) (CXCL8), human recombinant (rHulL-8-Pichia)

Catalog No: 97114
Lot No: XXXXX
Source: Pichia pastoris

Synonyms: IL-8, CXCL8, Monocyte-derived neutrophil chemotactic factor, MDNCF, T-cell chemotactic factor,

Neutrophil-activating protein 1, NAP-1, Protein 3-10C, Granulocyte chemotactic protein 1, GCP-1,

Monocyte-derived neutrophil-activating peptide, MONAP, Emoctaki

Background

Interleukin-8 (IL-8) is a chemokine produced by macrophages and other cell types such as epithelial cells. It is also synthesized by endothelial cells, which store IL-8 in their storage vesicles, the Weibel-Palade bodies. When first encountering an antigen, the primary cells to encounter it are the macrophages who phagocytose the particle. Upon processing, they release chemokines to signal other immune cells to come in to the site of inflammation. IL-8 is one such chemokine. It serves as a chemical signal that attracts neutrophils at the site of inflammation, and therefore is also known as Neutrophil Chemotactic Factor.

Description

Interleukin-8 human recombinant produced in yeast is a single, glycosylated polypeptide chain containing 79 amino acids and having a molecular mass of 9 kDa. IL-8 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a concentrated (1 mg/ml) solution in water containing 20 mM sodium phosphate buffer pH 8.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-8 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-8, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL8 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Activity

Specific activity of IL8 in chemotaxis of donor PBL neutrophils, threshold concentration of 25 ng/ml corresponding to a specific activity of 40,000 IU/mg.

Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.