

Active Recombinant Human CXCL8

Cat. No. CXCL8-2238H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant human IL-8 (CXCL8) produced in Yeast is a single, non-glycosylated, polypeptide chain containing 99 amino acids, and having a predicted molecular mass of approximately 11.0kDa.

Species Human

Source Yeast

Description IL-8 was originally discovered as a neutrophil chemotactic and activating factor. It was also referred to as neutrophil chemotactic factor (NCF), neutrophil activating protein (NAP), monocytederived neutrophil chemotactic factor (MDNCF), Tlymphocyte chemotactic factor (TCF), granulocyte chemotactic protein (GCP) and leukocyte adhesion inhibitor (LAI). Many cell types, including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells,keratinocytes, hepatocytes, chondrocytes, and various tumor cell lines, can produce IL-8 in response to a wide variety of proinflammatory stimuli such as exposure to IL1, TNF, LPS, and viruses. IL-8 is a member of the alpha (CXC) subfamily of chemokines, which also includes platelet factor 4, GRO, IP10, etc. IL-8 is a potent chemoattractant for neutrophils. In addition, IL-8 also has a wide range of other proinflammatory effects. IL-8 causes degranulation of neutrophil specific granules and azurophilic granules. IL-8 induces expression of the cell adhesion molecules CD11/CD18 and enhances the adherence of neutrophils to endothelial cells and subendothelial matrix proteins. Besides neutrophils, IL-8 is also chemotactic for basophils, T cells and eosinophils. IL-8 has been reported to be a comitogen for keratinocytes and was also shown to be an

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	autocrine growth factor for melanoma cells. IL-8 was also reported to be angiogenic both in vivo and in vitro.
Form	Lyophilized from a 0.2µm filtered solution in PBS containing 0.1% HAS, pH7.4.
Bio-activity	Measured by its ability to induce myeloperoxidase release from cytochalasin B treated human neutrophils. The ED50 for this effect is typically 0.15-0.35µg/mL. Measured by its ability to chemoattract human CXCR2 transfected BaF3 mouse proB cells. The ED50 for this effect is typically 0.5-2.5ng/mL.
Endotoxin	≤1EU/µg, determined by the LAL method.
Purity	≥97%, as determined by SDS-PAGE and HPLC method.
Usage	FOR RESEARCH ONLY
Storage	Lyophilized samples are stable for greater than six months from date of receipt at -20 centigrade to -70 centigrade. The reconstituted samples can be stored under sterile conditions at 2- 8 centigrade for one month or at -20 centigrade to -70 centigrade for three months without detectable loss of activity. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of not less than 100µg/ml.

GENE INFORMATION

Gene Name	CXCL8 chemokine (C-X-C motif) ligand 8 [Homo sapiens]
Official Symbol	CXCL8

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Synonyms	IL8; NAF; GCP1; LECT; LUCT; NAP1; GCP-1; LYNAP; MDNCF; MONAP; NAP-1; interleukin-8; T-cell chemotactic factor; alveolar macrophage chemotactic factor I; beta endothelial cell-derived neutrophil activating peptide; beta-thromboglobulin-like protein; emoctakin; granulocyte chemotactic protein 1; interleukin 8; lung giant cell carcinoma-derived chemotactic protein; lymphocyte derived neutrophil activating peptide; monocyte-derived neutrophil chemotactic factor; monocyte-derived neutrophil-activating peptide; neutrophil-activating peptide 1; small inducible cytokine subfamily B, member 8; tumor necrosis factor-induced gene 1
Gene ID	3576
mRNA Refseq	NM_000584
Protein Refseq	NP_000575
MIM	146930
UniProt ID	P10145
Chromosome Location	4q13-q21
Pathway	ATF-2 transcription factor network, organism-specific biosystem; ATF4 activates genes, organism-specific biosystem; Amoebiasis, conserved biosystem
Function	chemokine activity; interleukin-8 receptor binding; protein binding

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