

Human Interleukin 8 (IL-8)

CATALOG NUMBER: IL-08-025P, 25 µg

Introduction	<p>Interleukin 8 (IL8 or chemokine (C-X-C motif) ligand 8, CXCL8) is a chemokine produced by macrophages and other cell types such as epithelial cells, airway smooth muscle cells and endothelial cells. Endothelial cells store IL-8 in their storage vesicles, the Weibel-Palade bodies. In humans, the interleukin-8 protein is encoded by the IL8 gene. IL-8 is initially produced as a precursor peptide of 99 amino acids long which then undergoes cleavage to create several active IL-8 isoforms. In culture, a 72 amino acid peptide is the major form secreted by macrophages.</p> <p>IL-8, also known as neutrophil chemotactic factor, has two primary functions. It induces chemotaxis in target cells, primarily neutrophils but also other granulocytes, causing them to migrate toward the site of infection. IL-8 also induces phagocytosis once they have arrived. IL-8 is also known to be a potent promoter of angiogenesis. In target cells, IL-8 induces a series of physiological responses required for migration and phagocytosis, such as increases in intracellular Ca²⁺, exocytosis (e.g. histamine release), and the respiratory burst.</p>
Description	Recombinant human IL-8 produced in Yeast is a glycosylated 15-25 kDa protein
Source	Yeast
Purity	≥ 97% purity (by SDS PAGE and HPLC)
Endotoxin Level	≤1 EU/mg, determined by the LAL method
Biological Activity	Measured in a cell proliferation assay using TF-1 cells. The specific activity shall be not less than 3×10 ⁷ IU/mg.
Formulation	<p>Lyophilized from a 0.2µm filtered solution in PBS. pH7.4</p> <p>Reconstitute with double distilled water at a concentration of no less than 100 µg/ml with 0.1% human serum albumin (A highly purified plant-derived human serum albumin is strongly suggested to be used, Cat# HAS-1r) or bovine serum albumin as a stock.</p>
Storage	Stable for 6-months from the date of shipment when kept at -20 °C or -70 °C. Upon reconstitution, it can be stored at 4 °C for at least one month or -20 °C for at least three months. Avoid repeated freeze-thaw cycles.
Usage	This product is produced for LABORATORY RESEARCH USE ONLY.