

Recombinant Human Interleukin 8

Catalog Number: SJB05
Strength: 25µg

Specifications and Use

Source	<ul style="list-style-type: none">● Yeast.
Molecular Mass	<ul style="list-style-type: none">● Approximately 8.3kD.
Purity	<ul style="list-style-type: none">● ≥97%.
Endotoxin Level	<ul style="list-style-type: none">● <1EU/µg, determined by the LAL method.
Biological Activity	<ul style="list-style-type: none">● Measured by inhibiting cAMP ability of HEK293/CXCR1 cell. The ED50 for this effect is typically 0.5-20ng/mL.
Formulation	<ul style="list-style-type: none">● Sterile lyophilized powder, in PBS containing 0.1% HSA, pH7.4.
Reconstitution	<ul style="list-style-type: none">● It is recommended to reconstitute the lyophilized rHuIL-8 in 0.2ml sterile water.
Storage	<ul style="list-style-type: none">● Lyophilized samples are stable for 36 months from date of manufacture at -20°C to -70°C.● Upon reconstitution, this cytokine can be stored under sterile conditions at 2-8°C for one month or at -20°C to -70°C in a manual defrost freezer for three months without detectable loss of activity.● Avoid repeated freeze-thaw cycles.

Interleukin-8 (IL-8), also known as CXCL8, GCP-1, and NAP-1. CXCL8 was originally discovered and purified independently by a number of laboratories as a neutrophil chemotactic and activating factor. It was also referred to as neutrophil chemotactic factor (NCF), neutrophil activating protein (NAP), monocyte derived 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 CXCL8 in response to a wide variety of proinflammatory stimuli such as exposure to IL1, TNF, LPS, and viruses. CXCL8 is a member of the alpha (CXC) subfamily of chemokines, which also includes platelet factor 4, GRO, IP10, etc. CXCL8 is a potent chemoattractant for neutrophils. In addition, CXCL8 also has a wide range of other proinflammatory effects. CXCL8 causes degranulation of neutrophil specific granules and azurophilic granules. CXCL8 induces expression of the cell adhesion molecules CD11/CD18 and enhances the adherence of neutrophils to endothelial cells and subendothelial matrix proteins. Besides neutrophils, CXCL8 is also chemotactic for basophils, T cells and eosinophils. CXCL8 has been reported to be a comitogen for keratinocytes and was also shown to be an autocrine growth factor for melanoma cells. CXCL8 was also reported to be angiogenic both *in vivo* and *in vitro*.

FOR LABORATORY USE ONLY.