Recombinant Human Interleukin 8

Catalog Number	Size
AG115-25	25μg
AG115-B	Bulk

Specifications and Use

Description 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.

Source *Yeast*

Molecular Mass Approximately 8.0kDa.

Purity ≥97%, as determined by SDS-PAGE and HPLC method.

Endotoxin Level ≤1EU/μg, determined by the LAL method.

Biological Activity Measured by its ability to induce myeloperoxidase release from cytochalasin Btreated human neutrophils. The ED50 for this effect is typically 0.15-0.35**μ**g/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.

Formulation Lyophilized from a 0.2μm filtered solution in PBS containing 0.1% HAS, pH7.4.

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.

Storage Lyophilized samples are stable for greater than six months from date of receipt at -20°C to -70°C.
The reconstituted samples can be stored under sterile conditions at 2- 8°C for one month or at -20°C to -70°C for three months without detectable loss of activity.
Avoid repeated freeze-thaw cycles.

Human Interleukin 8

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 autocrine growth factor for melanoma cells. IL-8 was also reported to be angiogenic both in vivo and in vitro.

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