

RECOMBINANT HUMAN INTERLEUKIN-8 (hIL-8/CXCL8)

Catalog # 02663

10 mg per vial

Catalog # 02863

50 mg per vial

PRODUCT DESCRIPTION:

Interleukin-8 (IL-8) is a member of the α (CXC) subfamily of chemokines. It is produced by many cell types, including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells, keratinocytes, hepatocytes, chondrocytes, and various tumor cell lines, in response to a wide variety of pro-inflammatory stimuli such as exposure to IL-1, TNF, LPS, and viruses. IL-8 is a potent chemoattractant for neutrophils, basophils, T cells and eosinophils. IL-8 also has pro-inflammatory effects, such as degranulation of neutrophil specific granules and azurophilic granules; induction of expression of the cell adhesion molecules CD11/CD18 and enhancement of adherence of neutrophils to endothelial cells and sub-endothelial matrix proteins. Beside neutrophils, IL-8 has been reported to be a co-mitogen for keratinocytes and was also shown to be an autocrine growth factor for melanoma cells. Recently, IL-8 was reported to be angiogenic both *in vivo* and *in vitro*. The 72 amino acid residue recombinant protein has a predicted molecular mass of approximately 8 kDa.

SOURCE:

A DNA sequence encoding the mature human IL-8 protein was expressed in *E. coli*.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1 μ g of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a sterile solution in PBS containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

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 no less than 10 μ g/mL of the cytokine.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted human IL-8/CXCL8 can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined by induction of myeloperoxidase release from human neutrophils, or chemotaxis of mouse BaF/3 cells transfected with human CXCR-2. The ED₅₀ for these effects were typically 0.15 - 0.3 μ g/mL, or 0.1 - 0.5 ng/mL, respectively.

**THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**