



Product Data Sheet

Cat # RP-1042

Recombinant Porcine Interleukin-8 (1-72) (CXCL8)

**Size:** 10 ug

Interleukin-8 (IL-8) is a chemokine produced by macrophages and other cell types such as epithelial cells. It is also synthesized by endothelial cells, which store IL-8 in their storage vesicles, the Weibel-Palade bodies. When first encountering an antigen, the primary cells to encounter it are the macrophages that phagocytose the particle. Upon processing, they release chemokines to signal other immune cells to come in to the site of inflammation. IL-8 is one such chemokine. It serves as a chemical signal that attracts neutrophils at the site of inflammation, and therefore is also known as Neutrophil Chemotactic Factor.

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

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**Source:** *Escherichia Coli* Interleukin-8 Porcine Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 72 amino acids and having a molecular mass of 8291 Dalton. The IL-8 is purified by proprietary chromatographic techniques. Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

**Applications and Suggested Dilutions:** Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. It is recommended to reconstitute the lyophilized Interleukin 8 in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. Users must optimize the appropriate concentration and conditions for each assay.

**Storage and Stability:** Lyophilized Interleukin-8 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL8 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

**Please prevent freeze-thaw cycles.**

**Biological Activity:** The biological activity of IL8 was determined by the dose dependent mobilization of intracellular calcium (calcium flux) with human neutrophils and was found to be >1.0 ng/mL.

**Protein content:** Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.638 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a standard solution of IL-8 as a Reference Standard