

Human IL-8 protein (aa 23-99)

Cat #: PRP100033

Size: 10µg/100µg/1mg

Product Information

	Product Name: Human IL-8 protein (aa 23-99)		
REF	Catalog Number: PRP100033	LOT	Lot Number: Refer to product label
	Purity: > 95 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: Human Cells
	Shipping: The product is shipped at ambient temperature.		

Background: Interleukin 8 (IL-8), also known as CXCL8, which is a chemokine with a defining CXC amino acid motif that was initially characterized for its leukocyte chemotactic activity, is now known to possess tumorigenic and proangiogenic properties as well. This chemokine is secreted by a variety of cell types including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells, and various tumor cell lines in response to inflammatory stimuli (IL1, TNF, LPS, etc). In human gliomas, IL-8 is expressed and secreted at high levels both in vitro and in vivo, and recent experiments suggest it is critical to glial tumor neovascularity and progression. Levels of IL-8 correlate with histologic grade in glial neoplasms, and the most malignant form, glioblastoma, shows the highest expression in pseudopalisading cells around necrosis, suggesting that hypoxia/anoxia may stimulate expression. Interleukin (IL)-8/CXCL8 is a potent neutrophil chemotactic factor. Accumulating evidence has demonstrated that various types of cells can produce a large amount of IL-8/CXCL8 in response to a wide variety of stimuli, including proinflammatory cytokines, microbes and their products, and environmental changes such as hypoxia, reperfusion, and hyperoxia. Numerous observations have established IL-8/CXCL8 as a key mediator in neutrophil-mediated acute inflammation due to its potent actions on neutrophils. However, several lines of evidence indicate that IL-8/CXCL8 has a wide range of actions on various types of cells, including lymphocytes, monocytes, endothelial cells, and fibroblasts, besides neutrophils. The discovery of these biological functions suggests that IL-8/CXCL8 has crucial roles in various pathological conditions such as chronic inflammation and cancer. IL-8 has been associated with tumor angiogenesis, metastasis, and poor prognosis in breast cancer. IL-8 may present a novel therapeutic target for estrogen driven breast carcinogenesis and tumor progression.

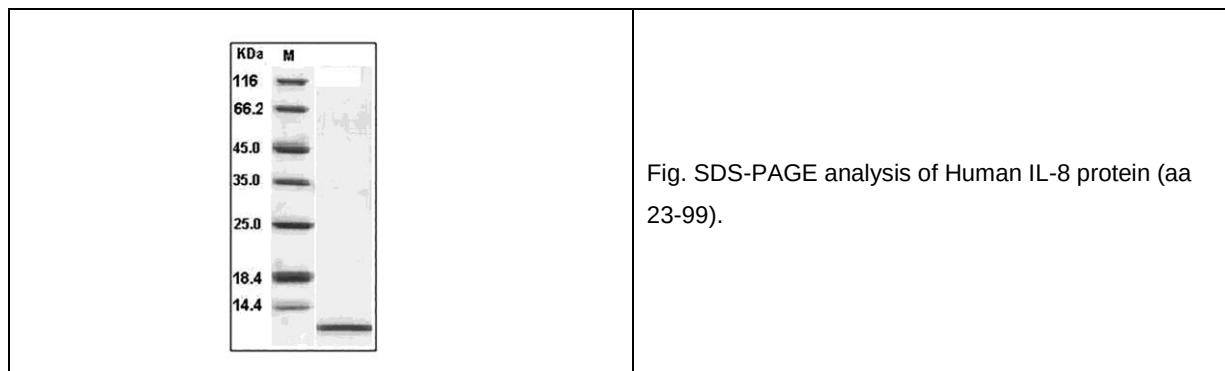
Sequence: The 77 amino acid endothelial-cell derived form (Ala 23-Ser 99) of the mature human IL8 (NP_000575.1) was expressed and purified.

Protein length: The recombinant mature human cytokine IL8 comprising the 1-77 amino acids predicts a molecular mass of 8 kDa, and migrates as an approximately 12 kDa protein in SDS-PAGE due to glycosylation.

Formulation: Lyophilized from sterile 100mM NaCl, 50mM Tris, pH 7.5.

Storage Instructions: Lyophilized Human IL8 protein (aa 23-99) product should be stored desiccated below -18°C. Upon reconstitution, the protein 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). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Human IL8 protein (aa 23-99) in sterile ddH₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.



Note: The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.