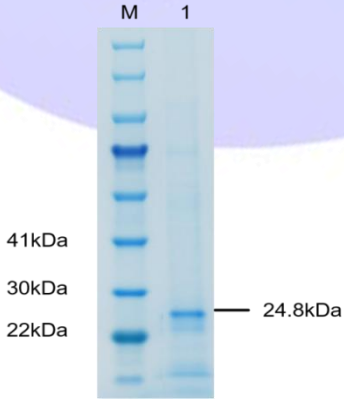
Human Interleukin 8 (IL-8) Protein, Recombinant

I. For sale

Product name	Catalog #	Size
Human Interleukin 8 (IL-8) Protein, Recombinant	P01I0056	10ug
		50ug
		500ug
		1mg

II. Product Description

Other Names	IL8; NAF; GCP1; LECT; LUCT; NAP1; GCP-1; LYNAP; MDNCF; MONAP; NAP-1; SCYB8
Protein & NCBI Number	P10145, NM_001310420.1
Host	E.coli
Express Region	Met1—Ser99
Protein Sequence	MTSKLAVALLAAFLISAALCEGAVLPRSAKELRCQCIKTYSKPFHPKFIKELRVIESGPHCANTEII VKLSDGRELCLDPKENWVQRVVEKFLKRAENS
Molecular Weight	The protein consists of 221 amino acids (including the fusion tag), with a predicted molecular weight of 24.8kDa, which matches the actual molecular weight.
Fusion Tag	6×His-SUMO (N-terminus)
Purity	≥75% SDS-PAGE
Physical Property	Liquid
Components	0.01M PBS+20% glycerol, sterile solution.
Storage & Stability	After aliquoting, the stability of the samples can be maintained for up to 6 months at -20°C to -80°C, avoiding repeated freeze-thaw cycles.
Applications	Antibody preparation, immunoassay (ELISA, WB), subcellular localization and interaction protein identification, etc.
Lead Time	5 to 10 business days; 2 to 3 days for stock products
Figure. SDS-PAGE	 Bis-Tris (MOPS) SDS-PAGE

III. **Storage and Transportation**

Transport at 2-8℃, product is stable for up to twelve months from date of receipt under sterile conditions at -20℃ to -80℃.

IV. **Notes**

This product is for research use only. Please wear laboratory attire and disposable gloves when handling.

V. **Background**

The protein encoded by IL8 gene is a member of the CXC chemokine family and is a major mediator of inflammatory responses. The IL-8 protein is secreted by mononuclear macrophages, neutrophils, eosinophils, T lymphocytes, epithelial cells, and fibroblasts. It functions as a chemotactic factor by guiding the neutrophils to the site of infection. Bacterial and viral products rapidly induce IL-8 expression. IL-8 also participates with other cytokines in the proinflammatory signaling cascade and plays a role in systemic inflammatory response syndrome (SIRS). This gene is believed to play a role in the pathogenesis of the lower respiratory tract infection bronchiolitis (a common respiratory tract disease caused by the respiratory syncytial virus (RSV), the lung inflammation associated with csytic fibrosis, coronary artery disease and endothelial dysfunction.

IL-8 is also secreted by tumor cells and promotes tumor migration, invasion, angiogenesis and metastasis. This chemokine is also a potent angiogenic factor. The binding of IL-8 to one of its receptors (IL-8RB/CXCR2) increases the permeability of blood vessels and increasing levels of IL-8 are positively correlated with increased severity of multiple disease outcomes. This gene and other members of the CXC chemokine gene family form a gene cluster in a region of chromosome 4q.

VI**. References**

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2. IL8 Levels Predict Checkpoint Inhibitor Success.[J]. Cancer Discovery,2020,10(7):895.胡洪慧,王凤山,凌沛学.白细胞介素-4 的研究进展.中国药学杂志,2005(10):721-725.
3. 李瑶,吕德官,陈临溪.IL-8 及其受体药物与疾病的研究进展[J].中国药理学通报,2014,30(03):310-314.
4. 张文胜.白细胞介素-8 研究进展[J].生物医学工程学杂志,2002(04):697-702.