

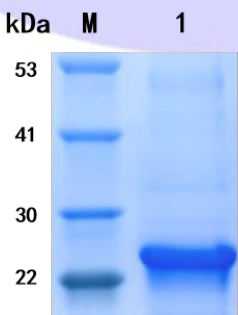


Human Interleukin 8 (IL-8) Protein, Recombinant

I. For sale

Product name	Catalog #	Size
Human Interleukin 8 (IL-8) Protein, Recombinant	P01I0031	10ug
		50ug
		100ug
		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_000584.4
Host	E.coli
Express Region	1-99aa
Protein Length	Total length of the protein (including Tag)
Protein Sequence	MTSKLAVALLAAFLISAALCEGAVLPRSAKELRCQCIKTYSKPF HPKFIKELRVIESGPHCANTEIIVKLSDGRELCLDPKENWVQRVVEKFLKRAENS
Molecular Weight	about 11.1kDa
Fusion Tag	6×His-SUMO (N-terminus)
Purity	≥95% SDS-PAGE
Physical Property	liquid or lyophilized powder
Reconstitution	Storage solution: We recommend using PBS or a suitable solvent according to the experimental requirements to prepare 1mg/mL storage solution, aliquot and store at -20 °C. Working solution: According to the experimental requirement, dilute Storage solution. The working solution can be stored at 4°C for 2-3 weeks after dilution.
Storage & Stability	The shelf life of liquid form is 6 months stored at -20 °C /-80 °C. The shelf life of lyophilized form is 12 months stored at -20 °C /-80 °C.
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	 <p>kDa M 1</p> <p>53</p> <p>41</p> <p>30</p> <p>22</p> <p>Bis-Tris (MOPS) SDS-PAGE</p>



III. Storage and Transportation

Product is stable for up to twelve months from date of receipt under sterile conditions at -20°C to -80°C . For optimal storage the lyophilized powder and protein stock solution should be aliquoted, and avoid freeze-thaw cycles.

IV. 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 cystic 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.

V. References

1. Teijeira Alvaro, Garasa Saray, Ochoa Maria C, Villalba Esparza María, Olivera Irene, Cirella Assunta, Eguren Santamaria Iñaki, Berraondo Pedro, Schalper Kurt A, de Andrea Carlos E, Sanmamed Miguel F, Melero Ignacio. Interleukin-8, Neutrophils, and NETs in a Collusion against Cancer Immunity and Immunotherapy. Clin Cancer Res, 2021, 27(9):2383-2393.