

## Recombinant Human Interleukin-8, 72a.a./CXCL8

### Information

Gene ID	3567
Accession #	P10145
Alternate Names	(Ser-IL-8)72, GCP/IL-8 protein I, IL8/NAP1 form III, LYNAP, MDNCF-c, NAF.
Source	Escherichia coli.
M.Wt	Approximately 8.4 kDa, a single non-glycosylated polypeptide chain containing 72 amino acids.
AA Sequence	SAKELRCQCI KTYSKPFHPK FIKELRVIES GPHCANTEII VKLSDGRELC LDPKENWVQR VVEKFLKRAE NS
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  - 12 months from date of receipt, -20 to -70°C as supplied.  - 1 month, 2 to 8°C under sterile conditions after reconstitution.  - 3 months, -20 to -70°C under sterile conditions after reconstitution.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a chemotaxis bioassay using human CXCR2 transfected mouse BaF3 cells is less than 2 ng/ml, corresponding to a specific activity of >5.0 × 10 <sup>5</sup> IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

## Components and Storage

THEOLIN	Egologe		
Components	5 µg	100 μg	500 µg
Recombinant Human Interleukin-8, 72a.a./CXCL8	5 µg	100 µg	500 µg

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### Quality Control

Purity	> 97% by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/µg of rHuIL-8, 72a.a./CXCL8 as determined by LAL method.

#### Description

Interleukin-8 (IL-8) is encoded by the IL8 gene and 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. There are many receptors capable to bind IL-8, the most affinity to IL-8 are receptors CXCR1, and CXCR2. As a member of the CXC chemokine family, function of IL-8 is the induction of chemotaxis in its target cells, like neutrophil granulocytes, basophils, and T-cells. IL-8 (72a.a.) has a 5-10-fold higher activity on neutrophil activation, compared to IL-8 (77a.a.). IL-8 is often associated with inflammation and has been cited as a proinflammatory mediator in gingivitis and psoriasis.

#### Reference

- 1. Modi WS, Dean M, Seuanez HN, et al. 1990. Hum Genet. 84:185-7.
- 2. Wolff B, Burns AR, Middleton J, et al. 1998. J Exp Med. 188:1757-62.
- 3. Utgaard JO, Jahnsen FL, Bakka A, et al. 1998. J Exp Med. 188:1751-6.
- 4. Van Damme J, Rampart M, Conings R, et al. 1990. Eur J Immunol. 20:2113-8.

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