

Recombinant Human Interleukin-8, 77a.a./CXCL8

#R00045

Size: 5 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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 5-10fold higher activity on neutrophil activation, compared to IL-8 (77a.a.). IL-8 is often associated with inflammation, it has been cited as a proinflammatory mediator in gingivitis and psoriasis.

AA Sequence

AVLPRSAKELRCQCIKTYSKPFHPKFIKELRVIESGPH
CANTEIIVKLSDGRELCLDPKENWVQRVVEKFLKRAE
NS

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.

Product Specification

Synonyms	CXCL 8, Emotakin, GCP-1, MDNCF, MONAP, NAP-1, Protein 3-10C, T-cell chemotactic factor
Accession	P10145
GeneID	3576
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 8.9 kDa, a single, non-glycosylated polypeptide chain containing 77 amino acids.
Purity	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ 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 ⁵ IU/mg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/µg of rHuIL-8, 77a.a./CXCL8 as determined by LAL method.