Product Information

Interleukin 8 Human

Recombinant, Expressed in *Escherichia coli*, Cell culture tested

I1645

Product Description

Interleukin 8 (IL-8), formerly called monocyte-derived neutrophil chemotactic factor, belongs to the α or C-X-C chemokine family.[1] The mature form of IL-8 has 4 cysteine residues, as do other members of the chemokine family, and the first two cysteine residues are separated by glutamine.[2] IL-8 genomic DNA consists of 4 exons and 3 introns with a single "TATA" and "CAT"-like sequence.[2] The mature form of human IL-8 is an 8.4 kDa protein containing 72 amino acids. IL-8 exhibits chemotactic activity *in vitro* for T cells,[3] basophils, and neutrophils,[2] and activates neutrophils to release lysosomal enzymes including myeloperoxidase, α-mannosidase, and β-glucuronidase.[2] IL-1 will induce the production of IL-8 from fibroblasts, keratinocytes, endothelial cells, hepatoma cells, astrocytoma cells, glioblastoma cells, lung epithelial cells, synovial membrane cells, melanocytes, melanoma cells, and gastric cancer cells.[2] LPS will stimulate IL-8 production in monocytes/macrophages.[2]

Reagent

Lyophilized from a 0.2 µm filtered solution containing 10 mM sodium phosphate, pH 7.5.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The lyophilized protein is stable for up to a few weeks at room temperature, but is best stored at −20 °C. For extended storage, reconstituted IL-8 should be stored in working aliquots at −20 °C. Repeated freezing and thawing is not recommended. Storage in frost-free freezers is also not recommended.

Reconstitution and Use

Reconstitute the contents of the vial using water to a concentration of 0.1-1.0 mg/mL. This solution can then be diluted into other aqueous buffers and stored at 2-8 °C for up to 1 week or aliquoted and stored at −20 °C for future use.

Product Profile

The biological activity is determined by its ability to chemoattract human peripheral blood neutrophils using a concentration range of 10.0-100.0 ng/mL.

References

1. Yoshimura, T., et al., Proc. Natl. Acad. Sci. USA, 84, 9233 (1987).
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3. Larsen, C.G., et al., Science, 243, 1464 (1989).
4. White, M.V., et al., Immunol. Lett., 22, 151 (1989).
5. Schröder, J.M., et al., J. Immunol., 139, 3474 (1987).

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