



## Product Information

### Interleukin-3 (IL-3)

Human, Recombinant  
Expressed in *E. coli*

Product Number **I 1646**

#### Product Description

Interleukin-3 (IL-3), originally called Colony Forming Unit-Stimulating Activity (CFU-SA)<sup>1</sup>, is a multifunctional protein produced by activated T lymphocytes.<sup>2</sup> IL-3 supports the formation of multilineage colonies in the early development of multipotent hematopoietic progenitor cells. IL-3 induces colony formation of macrophages, neutrophils, mast cells, and megakaryocytes from agar suspended bone marrow cells.<sup>3</sup> It interacts with IL-2 to stimulate growth of T lymphocytes<sup>4</sup> and induce immunoglobulin secretion from activated B cells.<sup>5</sup> Other synonyms for IL-3 include Pan-Specific Hematopoietin, Multicolony Stimulating Factor, Burst Promoting Activity, Histamine-Producing Cell Stimulating Factor, P Cell Stimulating Factor, and WEHI-3 factor.<sup>6</sup> IL-3 is a species-specific, variably glycosylated cytokine. Recombinant human IL-3, a 15 kDa globular protein, contains 133 amino acid residues.

#### Reagent

Lyophilized with no additives. Sterile filtered through a 0.2 µm filter.

#### Storage/Stability

The lyophilized protein is best stored at -20 °C. It is stable for up to a few weeks at room temperature. After reconstitution, store at 2-8 °C for up to 1 week. For extended storage, freeze in working aliquots at

-20 °C. Repeated freezing and thawing is not recommended.

#### Preparation Instructions

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 frozen for extended use. Additional filtration of the stock solution is not recommended and may result in product loss due to adsorption onto the filter membrane.

#### Product Profile

The proliferative activity of recombinant human IL-3 was tested in culture using human TF-1 cells.<sup>7, 8</sup>

#### References

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2. Luger, T., et al., *J. Immunol.*, **134**, 915 (1985).
3. Schrader, J., et al., *Immunol. Rev.*, **76**, 79 (1983).
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5. Tadmori, W., et al., *J. Immunol.*, **142**, 1950 (1989).
6. Schrader, J., et al., *Ann. Rev. Immunol.*, **4**, 205 (1986).
7. Kitamura, T., et al., *J. Cell. Physiol.*, **140**, 323 (1989).
8. Kuwaki, T., et al., *Biochem. Biophys. Res. Commun.*, **161**, 16 (1989).

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