



Product Information

Interleukin-5 (IL-5)

Human, Recombinant
Expressed in Sf 21 insect cells

Product No. **I 5273**

Product Description

Interleukin-5 is a product of activated T lymphocytes and exhibits activity on eosinophils, B cells and thymocytes. Synonyms or biological activities attributed to IL-5 include: EDF (eosinophil differentiating factor), BCGF-II (B-cell growth factor-II), TRF (T cell replacing factor), IgA-EF (IgA enhancing factor), and EO-CSF (eosinophil colony stimulating factor).¹⁻⁴ Natural IL-5 is a 32-34 kDa dimeric glycoprotein,^{5,6} although glycosylation is not required for activity. Human and mouse IL-5 show limited species cross-reactivity.⁷

Reagents

Lyophilized from 0.2 μ m-filtered phosphate buffered saline (PBS), pH 7.4 containing 100 μ g bovine serum albumin.

Reconstitution

Reconstitute the contents of the vial with 1 ml of 0.2 μ m-filtered PBS containing 0.1% BSA to prepare a working solution. Recommended working concentration range is 0.5 - 10 ng/ml. If aseptic technique is used, additional filtration should not be necessary and should be avoided due to possible adsorption onto the filter membrane.

Storage/Stability

Store at -20°C .

After reconstitution, store at 2-8 $^{\circ}\text{C}$ for a maximum of 3 months. For extended storage, freeze in working aliquots at -70°C or -20°C . Repeated freezing and thawing is not recommended.

Product Profile

The proliferative activity of human IL-5 is tested in culture using human TF-1 cells, adapted to grow with IL-5 stimulation.^{7,8} The EC_{50} is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

References

1. Clutterbuck, E. J., Blood, **73**, 1504 (1989).
2. Takatsu, K., et al., Immunol. Rev., **102**, 107 (1988).
3. Sanderson, C.J., et al., J. Exp. Med., **162**, 60 (1985).
4. Ramos, T., Immunol. Lett., **21**, 277 (1989).
5. McKenzie, D. T., et al., J. Immunol., **139**, 2661 (1987).
6. Tominaga, A., et al., J. Immunol., **140**, 1175 (1988).
7. Kitamura, T., et al., J. Cell. Physiol., **140**, 323 (1989).
8. Kuwaki, T., et al., Biochem. Biophys. Res. Comm., **161**, 16 (1989).

JWM/PSS 02/03

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.