



Product Information

INTERLEUKIN-12 (IL-12)
Human, Recombinant
Expressed in Sf 21 Insect Cells

Product No. **I 2276**

Product Description

Interleukin-12 (IL-12) or Natural Killer Cell Stimulatory Factor (NKSF) is a disulfide-linked heterodimer of a 35 kD light chain subunit and 40 kD heavy chain subunit. The molecular weight of IL-12 is approximately 75 kD. The p35 subunit of IL-12 shares amino acid sequence homology with IL-6 and G-CSF.² The p40 subunit has homology to the extracellular domain of the IL-6 receptor and to the ciliary neurotrophic growth factor receptor.^{3,4} IL-12 is produced predominantly by monocytes and NK cells.¹ IL-12 induces T cells and NK cells to produce IFN- γ . Human IL-12 is not active on mouse cells, but mouse IL-12 is active on both mouse and human lymphocytes.⁴

Performance Characteristics

The biological activity of recombinant, human IL-12 is measured by its ability to stimulate the proliferation of PHA-activated human T lymphoblasts.⁵ The EC₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

Product Information

Expressed in Sf 21 insect cells
Molecular Weight: approximately 75 kD
Package size: 5 μ g
Formulation: Lyophilized from a 0.2 μ m-filtered solution of PBS, pH 7.4.
Carrier Protein: 250 μ g bovine serum albumin (BSA).

Sterility: 0.2 μ m-filtered, aseptic fill

Endotoxin: \leq 0.1 ng/ μ g IL-12

Reconstitution

Reconstitute the contents of the vial using 0.2 μ m-filtered PBS containing 0.1% HSA or BSA to a concentration not less than 1 μ g/ml.

Storage/Stability

Prior to reconstitution, store at -20 °C. After reconstitution, store at 2-8 °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.

References

1. Trinchieri, G., et al., Progress in Growth Factor Research, **4**, 355, (1992).
2. Merberg, D., et al., Immunol. Today, **13**, 77 (1992).
3. Gearing, D., et al., Cell, **66**, 9 (1991).
4. Schoenhaut, D., et al., J. Immunol., **148**, 3433 (1992).
5. Stern, A., et al., Proc. Natl. Acad. Sci. USA, **87**, 6808 (1990).

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