

**Product No. I-3269****Interleukin-9 (IL-9)****Mouse, Recombinant**Expressed in *Sf*21 Insect Cells**Description**

Interleukin-9 was first identified in the mouse system as a T cell growth factor.<sup>1</sup> There is high sequence homology between mouse and human IL-9.<sup>1</sup> Overall sequence homology between human and mouse IL-9 cDNA's is 56% and 67% identity at the amino acid and nucleotide levels, respectively.<sup>1</sup> M07e cells are responsive to both mouse and human IL-9, while only mouse IL-9 can stimulate mouse P40-responsive cell lines.<sup>1</sup> Mouse IL-9 enhances erythroid burst formation by normal mouse bone marrow cells.<sup>2,3</sup> In addition, mouse IL-9 induces day 15 fetal thymocyte proliferation in the presence of IL-2,<sup>4</sup> and enhances the mast cell growth elicited by IL-3 or IL-4.<sup>5</sup> Mouse IL-9 also supports the growth of certain helper T cell clones.<sup>2,3</sup>

**Performance Characteristics**

The biological activity of mouse recombinant IL-9 is determined in a cell proliferation assay using TS1 cells, a mouse cell line.<sup>2</sup>

**Product Information**Expressed in *Sf*21 insect cellsPurity:  $\geq 97\%$  as determined by SDS-PAGE and N-terminal analysisEC<sub>50</sub>: 0.01 - 0.1 ng/mlPackage size: 10  $\mu$ g/vialLyophilization Buffer: Lyophilized from a 0.2  $\mu$ m- filtered solution of phosphate buffered saline (PBS), pH 7.4.Carrier Protein: 500  $\mu$ g bovine serum albumin (BSA).Sterility: 0.2  $\mu$ m-filtered, aseptic fillEndotoxin:  $\leq 0.1$  ng/ $\mu$ g IL-9**Reconstitution**

Reconstitute the contents of the vial using sterile-filtered PBS containing 0.1% HSA or BSA to a concentration not less than 1  $\mu$ g/ml.

**Storage**

Prior to reconstitution, store at  $-20^{\circ}\text{C}$ . After reconstitution, store at  $0-5^{\circ}\text{C}$  for a maximum of 3 months. For extended storage, freeze in working aliquots at  $-70^{\circ}\text{C}$  or  $-20^{\circ}\text{C}$ . Repeated freezing and thawing is not recommended.

**References**

1. Yang, Y., Leukemia and Lymphoma, **8**, 441 (1992).
2. Uyttenhove, C., et al., Proc. Natl. Acad. Sci. USA, **85**, 6934 (1988).
3. Van Snick, J., et al., J. Exp. Med., **169**, 363 (1989).
4. Suda, T., et al., J. Immunol., **144**, 1783 (1990).
5. Hultner, L., et al., J. Immunol., **142**, 3440 (1989).

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