

Recombinant Mouse Interleukin-9 (IL-9 Mouse)

Source: E.Coli

Catalog No.: CYT-373

Introduction :

Factor that is thought to be a regulator of hematopoiesis. It has been shown to enhance the growth of human mast cells and megakaryoblastic leukemic cells as well as murine helper t-cell clones. IL-9 is a glycoprotein with a molecular weight of 32-39 that is derived from T-cells, and maps to human chromosome 5.

Description :

Interleukin-9 Mouse Recombinant produced in E.Coli is a single, non-glycosylated single polypeptide chain containing 127 amino acids and having a molecular mass of 14,166 Dalton. The IL-9 is purified by proprietary chromatographic techniques.

Synonyms:

P40, HP40, T-cell growth factor p40, IL-9, P40 cytokine.

Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a concentrated (1mg/ml) solution containing no additives.

Solubility:

It is recommended to reconstitute the lyophilized Interleukin 9 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Interleukin-9 although stable at room temperature for 3 weeks, should be stored desiccated below -18⁰C. Upon reconstitution IL9 should be stored at 4⁰C between 2-7 days and for future use below -18⁰C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.

Purity:

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Gln-Arg-Cys-Ser.

Biological Activity:

The ED50 as determined by the dose-dependant stimulation of human MO7e cells is < 0.5 ng/ml, corresponding to a Specific Activity of 2 x 10⁶ IU/mg.

Protein content:

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.6 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).

2. Analysis by RP-HPLC, using a standard solution of IL-9 as a Reference Standard.

Usage:

Product is furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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