Recombinant Human IL-9

Catalog # FL139

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/μg of rHuIL-9 protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human MO7e cells is less than 0.2 ng/ml, corresponding to a specific activity of ≥ 5.0×10^6 IU/mg.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, with 150 mM NaCl, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	P15248 Gln19-Ile144
Amino acid sequence	QGCPTLAGILDINFLINKMQEDPASKCHCSANVTSCLCLGIPSDNCTRPCFSERLSQMTNTTMQTRYPLIFSRVKKSVEVLKN NKCPYFSCEQPCNQTTAGNALTFLKSLLEIFQKEKMRGMRGKI
Molecular weight	Approximately 14.1 kDa, a single non-glycosylated polypeptide chain containing 126 amino acids.
Synonyms	p40 cytokine, T-cell growth factor p40
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles afte r reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reco nstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Human IL-9 is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Interleukin-9 (IL-9) is encoded by the IL9 gene and produced by T-cells and specifically by CD4+ helper cells. IL-9 is an immu noregulatory cytokine enhances the proliferation of T lymphocytes, mast cells, erythroid precursor cells and megakaryoblastic l eukemia cell lines. Over-expression of IL-9 has been implicated in the pathogenesis of anaplastic lymphoma and Hodgkin's disea se. Whereas murine IL-9 can function on human cells, human IL-9 is inactive on mouse cells. Recombinant Human IL-9 is a 14 .1kDa protein of 126 amino acid, including 10 cysteine that are fully conserved between the human and murine proteins.

Validation Images