Recombinant Human IL-4 protein

E13-015

Catalog Number: E13-015-1, E13-015-2

Amount: 10μg, 50μg

Product description: Human IL-4 produced in E. coli is non-glycosylated polypeptide chain containing 131 amino acids (3-131 a.a; predicted MW=15.1kDa.). Protein was purified by cation exchange chromatography and gel filtration chromatography. Purity is greater than 95% by SDS-PAGE and Coomassie blue staining (Figure 1).

Background: IL-4 (interleukin 4) is a pleiotropic type I cytokine implicated in the development of Th2-mediated responses, which is associated with allergy and asthma. IL-4 is secreted by activated Th2, natural killer T cells and mast cells. IL-4 induces differentiation of naive T cells into the TH2 phenotype. IL-4 also promotes B cell proliferation, antibody isotype switching and expression of other TH2 cytokines including IL-5 and IL-9. There are two types of IL-4 receptors, the type I receptor is a heterodimer consisting of IL-4Rα chain and the common gamma chain(γc), which is also shared by the cytokines IL-2, -7, -9, -15 and -21; and the type II receptor is a heterodimer of IL-4Rα and IL-13Rα1, which is shared with IL-13.

GenBank accession number: NP_000580

Amino acid sequence: MGHKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTTEKETFCRAATVLRQFYSHHEKDT RCLGATAQQFHRHKQLIRFLKRLDRNLWGLAGLNSCPVKEANQSTLENFLERLKTIMREKYS KCSS

Formulation: Lyophilized from a 0.22μm filtered solution at a concentration of 1mg/ml in PBS.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 1.0 mg/ml.

Shipping&Stablity: The Product is shipped at ambient temperature. Upon reconstitution, the preparation is stable for up to 1 month at 2-8°C. For long term storage, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

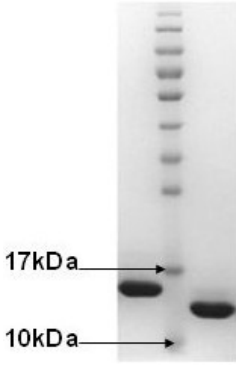

Figure 1. The purity of recombinant protein human IL-4 (E13-015) was determined by 12% SDS-PAGE of 2μg reduced (lane 1) and non-reduced (lane 3) recombinant hIL-4.

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