

IL-4

Catalog Number: E21-050

Amount: 10ug

**Altername:**Interleukin-4; IL-4; B-Cell Stimulatory Factor 1; BSF-1; Binetrakin; Lymphocyte Stimulatory Factor 1; Pitrakinra; IL4

**Storage/Stability:**Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.Reconstituted protein solution can be stored at 4-7°C for 2-7 days.Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Background:**Interleukin-4 (IL-4) is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. IL-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of naive CD4+ T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergic response.

Species: Human

**Reconstitution:** Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100  $\mu$ g/ml. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin:Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Purity: Greater than 95% as determined by reducing SDS-PAGE.

**Description:**Recombinant Human Interleukin-4 is produced by our E.coli expression system and the target gene encoding His25-Ser153 is expressed.

Product State:Lyophilized

**Ship Description:** The product is shipped at ambient temperature.

 $\textbf{Formulation:} Lyophilized from a 0.2~\mu m filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.$ 

Expression system: E.coli

