

Recombinant Human IL-4

Catalog # PBG10235

Specification

Recombinant Human IL-4 - Product Information

Recombinant Human IL-4 - Additional Information

Description

IL-4 is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. 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 allergy. Recombinant human IL-4 is a 15.1 kDa globular protein containing 130 amino acid residues.

BiologicalActivity

The ED₅₀ as determined by the dose-dependent stimulation of human TF-1 cells is ≤ 0.2 ng/ml, corresponding to a specific activity of $\geq 5 \times 10$ ⁶ units/mg.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is $<0.1 \text{ ng}/\mu\text{g}$ of protein ($<1\text{EU}/\mu\text{g}$).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

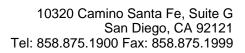
Precautions

Recombinant Human IL-4 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human IL-4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence





• <u>Immunoprecipitation</u>

- Flow Cytomety
 Cell Culture

Recombinant Human IL-4 - Images