

RELIATech GmbH
Lindenerstr. 15
38300 Wolfenbüttel
Germany

Tel.: +49 5331 8586 987
Fax.: +49 5331 8586 989
Email: info@reliatech.de
Web: <http://www.reliatech.de>

Recombinant Human Interleukin-4

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 14.9 kDa globular protein containing 129 amino acid residues

Source:	E. coli
Molecular Weight:	14.9 kDa
Purity:	> 98% by SDS-PAGE and Silver staining
Endotoxin level:	< 0.1 ng per µg of IL-4
Stabilizer:	none
Buffer:	PBS
Formulation:	lyophilized

Biological Activity: The ED₅₀ as determined by the dose-dependent stimulation of human TF-1 cells is 0.1-0.3 ng/ml.

Reconstitution: The lyophilized IL-4 is soluble in water and most aqueous buffers. The lyophilized powder should be reconstituted in water to a concentration of 100 ng/µl. This solution can be diluted into water or other buffered solutions or stored at -20°C for future use. For most in vitro applications, IL-4 exerts its biological activity in the concentration range of 0.1 to 10.0 ng/ml.

Stability: The lyophilized IL-4, though stable at room temperature, is best stored desiccated below 0°C. Reconstituted IL-4 should be stored in working aliquots at -20°C. **Avoid repeated freeze-thaw cycles.**

Usage: Human IL-4 is offered for research use. Not for drug use. **Not for human use.**

Catalogue number: 200-022

Size: 10 µg

Range: 0.1-10.0 ng/ml

****Please note: always centrifuge product before opening vial!****