PEPROTECH

Princeton Business Park, 5 Crescent Ave., P O Box 275
Rocky Hill, NJ 08553 USA
Tele: 609.497.0253 Fax: 609.497.0321
www.peprotech.com Email: info@peprotech.com

Product Information Sheet

Recombinant Human IL-4

Catalog# 200-04

Source: *E.coli*

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.

Synonyms: BCGF, BCDF, B cell stimulating factor (BSF-1)

Sequence: MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLKTI MREKYSKCSS

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

Purity: ≥ 98% by SDS-PAGE gel and HPLC analyses.

Endotoxin: Endotoxin level is < 0.1 ng/µg of protein (<1EU/µg).

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

Biological activity: Determined by its ability to stimulate the proliferation of human TF-1 cells. The expected ED_{50} is ≤ 0.2 ng/ml, corresponding to a specific activity of ≥5 x 10^6 units/mg.

For a list of references please visit our website at www.peprotech.com

Country of Origin: USA

Storage/Stability:

Product Form	Temperature	Storage Time
Lyophilized	-20°C to -80°C	See expiration date
Lyophilized	4°C	12 months
Lyophilized	RT	1 month
Diluted as per CoA	-20°C to -80°C	12 months
Diluted as per CoA	2°C to 8°C	1 week
**Avoid repeated freeze-thaw cycles.		

Lot-specific information is not available on Product Information Sheet.
See Certificate of Analysis for details.

Usage: For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Updated 05/15/2013