

GFH9AF Recombinant Human IL-4 (Animal-Free)

Description

Interleukin-4 (IL-4) is an immunomodulatory cytokine that functions to induce naive helper T cells to differentiate into type 2 T helper (Th2) cells. Th2 cells subsequently produce more IL-4 in a positive feedback loop. IL-4 also promotes immunoglobulin IgG to IgE isotype switching on B cells. IL-4 binds the IL-4R α receptor to activate STAT6 signaling.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	130 aa
Molecular Weight	15.1 kDa
Source	E. coli
Accession Number	P05112
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

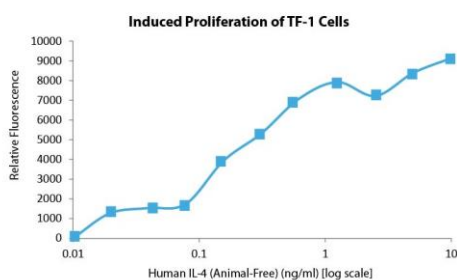
Specifications

Alternative Names	Interleukin-4, interleukin 4, IL4, IL 4, B cell stimulating factor, BSF-1, BCDF, BCGF, pitrakinra, BSF11
Biological Activity	Human IL-4 (Animal-Free) is fully biologically active when compared to standard. The activity is determined by the ability to induce TF-1 cells proliferation and it is typically less than 250 pg/ml. This corresponds to an expected specific activity of 4 x 10 ⁶ units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLTKI MREKYSKCSS

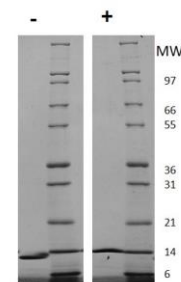
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced proliferation of TF-1 cells assay for Human IL-4.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human IL-4 has a predicted Mw of 15.1 kDa.