

GFH9 Recombinant Human IL-4

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.

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

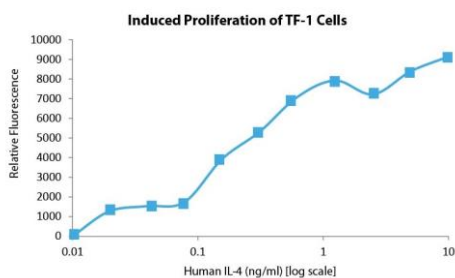
Specifications

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| Alternative Names | Interleukin-4, interleukin 4, IL4, IL 4, B cell stimulating factor, BSF-1, BCDF, BCGF, pitrakinra, BSF11 |
| Biological Activity | Human IL-4 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 4×10^6 units/mg. |
| Endotoxin Level | \leq 1.00 EU/ μ g 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 I IKTLSNLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLKTI MREKYSKCSS |

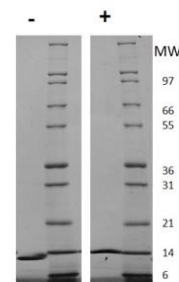
Preparation and Storage

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|------------------------------|---|
| 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 μ g of protein was loaded in each lane. Human IL-4 has a predicted Mw of 15.1 kDa.