

GFH83AF Recombinant Human IL-10 (Animal-Free)

Description

Interleukin-10 (IL-10) is an anti-inflammatory cytokine produced by macrophages and type 2 T helper (Th2) cells. IL-10 inhibits the production of pro-inflammatory cytokines such as interferon- γ (IFN- γ), Tumor Necrosis Factor α (TNF- α), interleukin-2 (IL-2), interleukin-3 (IL-3), interleukin-4 (IL-4), and Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF), made by macrophages and regulatory T cells. IL-10 also suppresses antigen presentation on antigen presenting cells, and enhances the survival, proliferation, and antibody production of B cells. Human IL-10 can act on mouse cells, while mouse IL-10 is not active on human cells.

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

Length	161 aa
Molecular Weight	18.8 kDa
Source	E. coli
Accession Number	P22301
Purity	$\geq 95\%$ determined by reducing and non-reducing SDS-PAGE

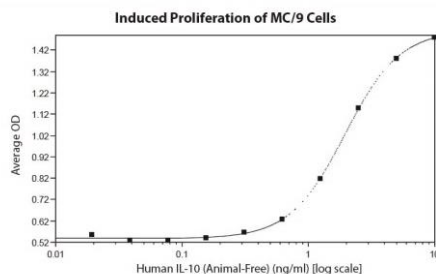
Specifications

Alternative Names	Interleukin-10, interleukin 10, IL10, IL 10
Biological Activity	Human IL-10 (Animal-Free) is fully biologically active when compared to standard. The activity is determined by the ability to induce MC/9 cells proliferation and it is typically less than 5 ng/ml. This corresponds to an expected specific activity of 2×10^5 units/mg.
Endotoxin Level	≤ 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	MSRGQYSRED NNCTHFPVGQ SHMLLELRTA FSQVKTFQQT KDQLDNILLT DSLMQDFKGY LGCQALSEMI QFYLVEVMPQ AEKHGPEIKE HLNSLGEKLLK TLRMLRRCH RFLPCENKSK AVEQVKSDFN KLQDQGVYKA MNEFDIFINC IEAYMMIKMK S

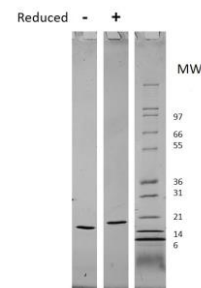
Preparation and Storage

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 10 mM HCl 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 MC/9 cells for Human IL-10. Cell proliferation was measured to calculate the ED50, which is as expected less than 5 ng/ml.



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-10 has a predicted Mw of 18.8 kDa.