

GFH10AF Recombinant Human IL-6 (Animal-Free)

Description

Interleukin-6 (IL-6) is a cytokine that is expressed by T cells, macrophages, and muscle cells. IL-6 acts to stimulate an immune response upon infection or trauma. IL-6 has both pro-inflammatory and anti-inflammatory functions and signals through the cell-surface type 1 cytokine receptor complex containing the IL-6Ra and gp130 chains. Human IL-6 is active on mouse and rat cells.

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

Length	185 aa
Molecular Weight	21 kDa
Source	E. coli
Accession Number	P05231
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

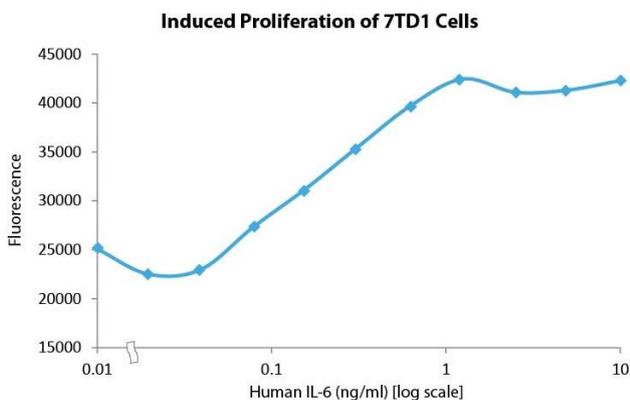
Specifications

Alternative Names	Interleukin-6, interleukin 6, IL6, IL 6, IFN-β2, interferon β 2, B-cell differentiation factor, BSF-2, HSF, MGI-2, CTL differentiation factor
Biological Activity	Human IL-6 is fully biologically active when compared to standard. The activity is determined by the ability to induce 7TD1 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. The activity can also be determined by the ability to induce B9 cells proliferation and it is typically less than 25 pg/ml, for an expected specific activity of 4 x 10 ⁷ 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 10 mM sodium phosphate, pH 7.5
AA Sequence	MPVPPGEDSK DVAAPHRQPL TSSERIDKQI RYILDGISAL RKETCNKSNM CESSKEALAE>NNLNLPKMAE KDGCFQSGFN EETCLVKIIT GLLEFEVYLE YLQNRFESSE EQARAVQMST KVLIQFLQKK AKNLDAITTP DPTTNASLLT KLQAQNQLWQ DMTTHLILRS FKEFLQSSLR ALRQM

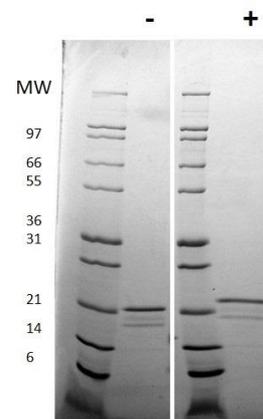
Preparation and Storage

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 7TD1 cells for Human IL-6. Cell proliferation was measured to calculate the ED50, which is as expected less than 250 pg/ml.



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-6 has a predicted Mw of 21 kDa.