

GFH84 Recombinant Human IL-11

Description

Interleukin-11 (IL-11) is a member of the gp130 family of cytokines. IL-11 functions to promote hematopoietic stem cell proliferation and megakaryocyte differentiation. In non-hematopoietic cell populations, IL-11 stimulates acute-phase proteins, modulates the development of immunoglobulin-producing B cells, and regulates bone turnover. IL-11 binds the IL-11R α receptor to activate JAK downstream signaling. Human IL-11 shows activity on mouse cells.

Length	179 aa
Molecular Weight	19.3 kDa
Source	E. coli
Accession Number	P20809
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

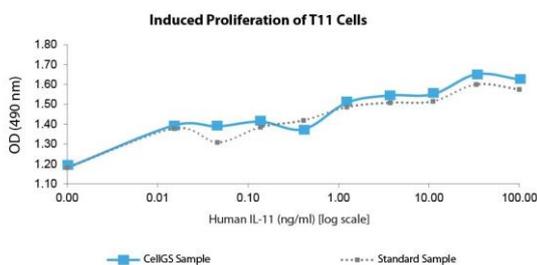
Specifications

Alternative Names	Interleukin-11, interleukin 11, IL11, IL 11
Biological Activity	Human IL-11 is fully biologically active when compared to standard. The activity is determined by the ability to induce T11 cells proliferation and it is typically less than 2.5 ng/ml. This corresponds to an expected specific activity of 4 x 10 ⁵ 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	MPGPPPGPPR VSPDPRAELD STVLLTRSLL ADTRQLAAQL RDKFPADGDH NLDLPTLAM SAGALGALQL PGVLTSLRAD LLSYLRHVQW LRRAGGSSLK TLEPELGLTQ ARLDRLRLRL QLLMSRLALP QPPDPAPP LAPPSSAWGG IRAAHAILGG LHLTLDWAVR GLLLLKTRL

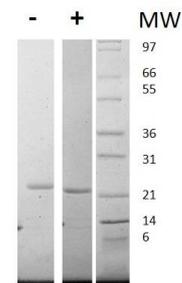
Preparation and Storage

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 T11 cells for Human IL-11. Cell proliferation was measured to calculate the ED50, which is as expected less than 2.5 ng/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-11 has a predicted Mw of 19.3 kDa.