

GFH80AF Recombinant Human IL-3 (Animal-Free)

Description

Interleukin-3 (IL-3) is a cytokine that is produced by activated T cells and mast cells. IL-3 induces the differentiation of hematopoietic stem cells into myeloid precursor cells, such as erythrocyte, megakaryocyte, granulocyte, monocyte, and dendritic cells. IL-3 also functions in the nervous system and is important during the B-1 cell regulation of chronic inflammatory diseases.

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

| | |
|-------------------------|-------------------------------------------------------|
| Length | 134 aa |
| Molecular Weight | 15.2 kDa |
| Source | E. coli |
| Accession Number | P08700 |
| Purity | ≥95% determined by reducing and non-reducing SDS-PAGE |

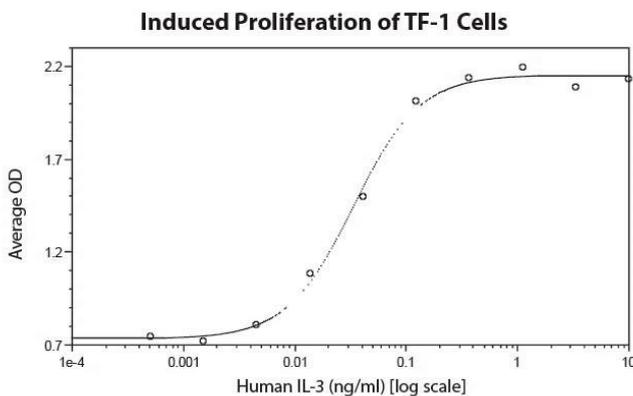
Specifications

| | |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative Names | Interleukin-3, interleukin 3, IL3, IL 3, MCGF, Multi-CSF, HCGF, P-cell stimulation factor |
| Biological Activity | Human IL-3 (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 2 ng/ml. This corresponds to an expected specific activity of 5.0×10^5 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 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5 |
| AA Sequence | MAPMTQTPL KTSWVNCNM IDEIITHLKQ PPLPLDFNN LNGEDQDILM ENNLRRPNLE AFNRAVKSLQ NASAIESILK NLLPCLPLAT AAPTRHPIHI KGDWNEFRR KLTFYKLTLE NAQAQQTLS LAIF |

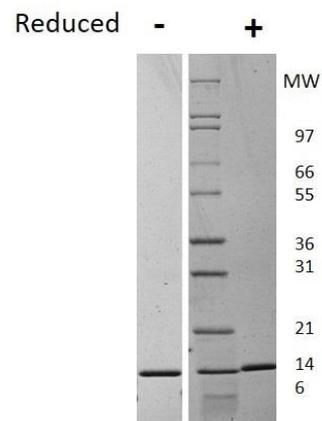
Preparation and Storage

| | |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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-3. Cell proliferation was measured to calculate the ED50, which is as expected less than 2 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-2 has a predicted Mw of 15.2 kDa.