

Synonym

IL3,MCGF,MGC79398,MGC79399,MULTI-CSF,Interleukin-3

Source

Human IL-3 Protein, premium grade(IL3-H5115) is expressed from E. coli cells. It contains AA Ala 20 - Phe 152 (Accession # <u>P08700-1</u>).

Predicted N-terminus: Met

Human IL-3 Protein, premium grade (IL3-H5115), designed for preclinical stage, has the same activity and performance with GMP Human IL-33 Protein, which enables a seamless transition from preclinical development to clinical phases. Premium Grade product offer a cost efficient alternative of GMP Grade products for the early development phase when safety of raw materials is not top priority. By using Premium Grade products in early development phase, you can transition easily into clinical and commercial phase without need to revalidate the raw materials and modify manufacturing process.

Molecular Characterization

IL-3(Ala 20 - Phe 152) P08700-1

This protein carries no "tag".

The protein has a calculated MW of 15.1 kDa. The protein migrates as 14 kDa±3 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 0.01 EU per µg by the LAL method.

Host Cell Protein

 $< 0.5 \text{ ng/}\mu\text{g}$ of protein tested by ELISA.

Host Cell DNA

<0.02 ng/μg of protein tested by qPCR.

Sterility

The sterility testing was performed by membrane filtration method.

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

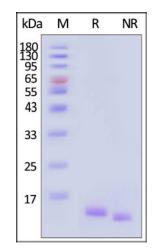
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



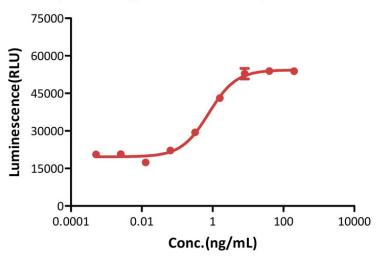




Human IL-3 Protein, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

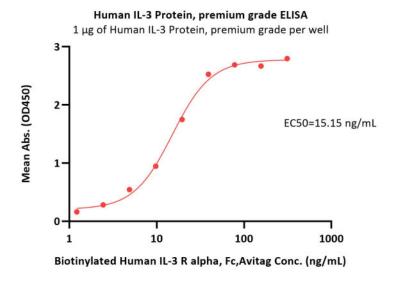
Bioactivity-Bioactivity CELL BASE

Human IL-3, premium grade stimuLates proliferation of TF-1 cells



Human IL-3 Protein, premium grade (Cat. No. IL3-H5115) stimulates proliferation of TF-1 cell. The specific activity of Human IL-3 Protein, premium grade is > 1.00x10^6 IU/mg, which is calibrated against human IL-3 WHO International Standard (NIBSC code: 91/510) (QC tested).

Bioactivity-ELISA



Immobilized Human IL-3 Protein, premium grade (Cat. No. IL3-H5115) at 10 μ g/mL (100 μ L/well) can bind Biotinylated Human IL-3 R alpha, Fc,Avitag (Cat. No. ILA-H82F3) with a linear range of 1.2-40 ng/mL (QC tested).

Background

Interleukin-3 (IL-3) is an interleukin, a type of biological signal (cytokine) which is encoded by the IL-3 gene located on chromosome 5 and produced primarily by activated T cells beside human thymic epithelial cells, activated murine mast cells, murine keratinocytes and neurons/astrocytes. The protein acts in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. The human IL-3 reported to be a monomer, as it is known, contains 133 amino acids residues which is a single non-glycosylated polypeptide. Specifically, human and murine IL-3 share low homology and it does not show activity on murine cells.



Human IL-3 Protein, premium grade

Catalog # IL3-H5115



Clinical and Translational Updates

