CellGenix® GMP Recombinant Human Interleukin-7 (rh IL-7)
Order No.: 1010-050 (50 μg)

Product Characteristics

Source: E. coli
Description: Human Interleukin-7, accession # P13232, Asp26-His177
N-terminal Met and C-terminal 6xHis-tag
Molecular mass 18.3 kDa
Formulation: Lyophilized from a 0.2 μm-filtered solution containing 25 mM sodium phosphate, 150 mM sodium chloride and 0.1 % polysorbate 20, pH 7.5.
Intended use: For further manufacturing use.

Quality Parameters

Identity: Confirmed by DNA-sequencing of the expression plasmid in end-of-production cells and N-terminal sequencing of the final product
Activity: 50 - 200 x 10^4 IU/mg calibrated against NIBSC #90/530
Measured in a cell proliferation assay using an IL-7-dependent cell line, lXN/2b
Purity: ≥ 97 %, as determined by SDS-PAGE (under reducing and non-reducing conditions, visualized by Coomassie staining)
Product-related proteins: ≤ 10 % oligomers as determined by SDS-PAGE (under non-reducing conditions, visualized by Coomassie staining)
Host-cell DNA: ≤ 200 ng/mg, as determined with a fluorimetric assay
Host-cell protein: ≤ 1.0 μg/mg, as determined by ELISA
Endotoxin: ≤ 25 EU/mg, as determined by LAL gel clot test according to Ph. Eur. and USP
Sterility: Sterility test according to Ph. Eur. and USP of the vial ed product
Mass per vial: 43 – 57 μg, as determined by spectrophotometrical measurement
Animal-derived component-free: ADCF Level 2: The final product contains neither animal- nor human-derived materials. ADCF Level 2 cytokines are produced in our dedicated animal-free facility. No animal-derived components are used throughout the complete production process. All ADCF Level 2 cytokines are produced in E. coli.
Shipments & Storage

Transport
Ambient temperature. Please refer to Technote (www.cellgenix.com)

Shelf Life
Minimum 6 months from date of shipping

Storage & Stability
Store lyophilized cytokine at -20 °C to -80 °C.
Store a 250 µg/ml cytokine solution
- 4 weeks at 2 °C to 8 °C under sterile conditions after reconstitution. Store in the original container.
- 4 months at -20 °C to -80 °C under sterile conditions after reconstitution. Store in 60 µl aliquots in polypropylene cryogenic vials.
Avoid repeated freeze/thaw cycles.

Handling Instructions

Reconstitution
Recommended in sterile water to a final concentration of 250 µg/ml.

Dilution
Recommended in CellGenix® serum-free media. For dilution with protein free medium, a carrier protein (0.1-1 % albumin or 1-10 % appropriate serum) has to be included. Failure to dilute product according to these instructions may result in loss of activity.

Quality Statement

This product is manufactured, tested and released in compliance with the relevant GMP-guidelines. No animal- or human-derived components are present in the final product and no animal- or human-derived materials were used in production (ADCF Level 2). USP chapter <1043> has been considered in the design of this product. This product is compliant with Ph. Eur. general chapter 5.2.12 and ISO Technical Standard 20399.