

Data Sheet

GMP Recombinant Human Interleukin-4 (rh IL-4), USP-grade

Order No.: 1003-050, 1003-1000

Product Characteristics

Source E. coli

Description Human Interleukin-4, accession # P05112, His25-Ser153

N-terminal Met

Molecular mass 15.1 kDa

Formulation Lyophilized from a 0.2 µm-filtered solution containing 1.5 mM potassium

phosphate, 8.1 mM sodium phosphate, 2.7 mM potassium chloride and 137

mM sodium chloride, pH 7.5

Quality Parameters

Identity Confirmed by DNA-sequencing of the expression plasmid in end-of-

production cells, Immunoblot and N-terminal sequencing of the final product

Activity 8 - 14 x 10⁶ IU/mg¹ calibrated against the NIBSC 88/656

Measured in a cell proliferation assay using an IL-4-dependent cell line, TF1

Purity ≥ 97 %, as determined by SDS-PAGE (under reducing and non-reducing

conditions, visualized by silver staining)

Product-related

proteins

≤ 10 % oligomers as determined by SDS-PAGE (under reducing and non-

reducing conditions, visualized by silver staining)

Host-cell DNA ≤ 1 ng/mg, as determined with the Threshold® system

Host-cell protein $\leq 1.0 \,\mu\text{g/mg}$, as determined by ELISA

Endotoxin ≤ 50 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 vialed product (direct

inoculation)

Mass per vial $1003-050: 43 - 57 \mu g$, $1003-1000: 900 - 1100 \mu g$,

as determined by spectrophotometrical measurement

¹USP units are equivalent to International Units per mg (IU/mg)

本品は研究用試薬です。治療および診断目的にはご使用できません。



Shipment & Storage

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

Expiry Minimum 6 months from date of shipping

Storage & Stabilty Store lyophilized cytokine at -20°C or below.

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 or below under sterile conditions after reconstitution. Store in 60 μl aliquots in polypropylene cryogenic vials.

Avoid repeated freeze/thaw cycles.

Handling Instructions

Recommended in sterile water to a final concentration of 250 μg/ml for 50 μg

vials or 500 μg/ml for 1000 μg vials.

Dilution Recommended in CellGro® / 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 materials were used during the manufacturing. USP chapter <1043> "ancillary materials for cell, gene, and tissue-engineered products" has been considered in the design of this product.

