

Data Sheet

CellGenix® Recombinant Human Tumor Necrosis Factor- α (rh TNF- α)

Preclinical Grade – Order No.: 1406-010 (10 μ g)*, 1406-050 (50 μ g)

Product Characteristics

Source	<i>E. coli</i>
Description	Human TNF- α accession # P01375, Val77-Leu233 N-terminal Met Molecular mass 17.5 kDa
Formulation	Lyophilized from a 0.2 μ m-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.
Intended use	For preclinical <i>ex vivo</i> use. Not intended for therapeutic use.

Quality Parameters

Activity	$\geq 20 \times 10^6$ IU/mg calibrated against current NIBSC reference standard Measured in a cell cytotoxicity assay using a TNF α -sensitive cell line, L929
Purity	≥ 95 %, as determined by SDS-PAGE (under reducing and non-reducing conditions, visualized by Coomassie staining)
Endotoxin	< 1000 EU/mg, as determined by LAL gel clot test
Sterility	Sterility test of the vial product
Mass per vial	1406-010: 10 μ g, 1406-050: 50 μ g
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 <i>E. coli</i> .

Shipment & Storage

Transport	Ambient temperature. Please refer to Technote (www.cellgenix.com)
Shelf life	3 years from date of shipment
Storage & Stability	<p>Store lyophilized cytokine at -20 °C to -80 °C.</p> <ul style="list-style-type: none">• Store a 100 µg/ml reconstituted cytokine solution for 4 weeks at 2 °C to 8 °C under sterile conditions after reconstitution. Store in the original container.• Store a 250 µg/ml reconstituted cytokine solution for 4 months at -20 °C to -80 °C under sterile conditions after reconstitution. Store in 80 µl aliquots in polypropylene cryogenic vials. <p>Avoid repeated freeze/thaw cycles.</p>

Handling Instructions

Reconstitution	Recommended in sterile water to a final concentration of 100 µg/ml (for 10 µg vials) or 250 µg/ml (for 50 µg vials).
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

Final manufacturing steps and QC are performed in a GMP facility. 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).