

## CERTIFICATE OF ANALYSIS

### TheraPure™ GMP T7 RNA Polymerase

**Catalog number:** EP011SKB011  
**Sample catalog number:** EP011AFB5SMP5  
**Lot number:** XX-XXXXXXX  
**Manufacturing Date:** YYYY-MM-DD  
**Retest Date:** YYYY-MM-DD  
**CoA Issue No.:** XXXX

**Concentration:** 200 U/μL  
**Storage:** at -20 ± 5 °C  
**Composition:** Protein in formulation buffer: 25 mM HEPES-NaOH, pH 7.6, 0.1 mM EDTA-Na<sub>2</sub>, 150 mM NaCl, 10 mM DTT, 0.09 % Triton X-100, 50 % glycerol

#### Compliance statement

This product has been manufactured, tested, and released in compliance with applicable regulations and current quality standards, as well as locally imposed requirements as per written agreements.

This product has been manufactured, packed, and tested in compliance with the defined manufacturing processes.

The relevant records for this lot have been reviewed for accuracy, completeness, and compliance with established standard operating procedures. Completeness includes confirmation that all quality events associated with the lot have been closed and accepted by QA of Manufacturer.

#### Intended use (regulatory) statement and disclaimer

For research use or further manufacturing. Not for diagnostic use or direct administration into humans or animals.

“TheraPure™ GMP” refers to the quality level of the raw, ancillary, or starting materials to be used for further manufacturing. TheraPure GMP products are manufactured in facilities with ISO 9001–certified quality management systems operating in accordance with relevant good manufacturing practice (GMP) principles as outlined in ICH Q7 or equivalent guidance documents or standards.

## QUALITY CONTROL

Parameter	Method	Requirement	Result
Color	Ph. Eur. 2.2.2	Not more intense than B9 (B palette)	Conforms
Clarity	Ph. Eur. 2.2.1	< 6 NTU	Conforms
pH	Potentiometric determination of pH, Ph. Eur. 2.2.3, USP <791>	7.2 – 8.0	0.0
Activity	Radioactive, in-house method	179 – 221 U/μL	0 U/μL
Protein concentration	Bradford, in-house method	Reported value	0.00 mg/mL
Identity	SDS-PAGE, in-house method	Main band of the test sample corresponds to	Conforms

**CERTIFICATE OF ANALYSIS**
**TheraPure™ GMP T7 RNA Polymerase**

**Catalog number:** EP011SKB011  
**Sample catalog number:** EP011AFB5SMP5  
**Lot number:** XX-XXXXXXX  
**Manufacturing Date:** YYYY-MM-DD  
**Retest Date:** YYYY-MM-DD  
**CoA Issue No.:** XXXX

Parameter	Method	Requirement	Result
		position of the main band of IRS	
Purity	SDS-PAGE, in-house method	≥ 95.0 %	0.0 %
Host cell gDNA	qPCR, in-house method	< 100.0 pg/mg protein (LOQ – 5 pg/mL)	0.0 pg/mg protein
Residual RNA	qPCR, in-house method	< 100.0 pg/mg protein (LOQ – 0.1 pg/mL)	0.0 pg/mg protein
Endodeoxyribonucleases (nicking activity)	Incubation with supercoiled plasmid DNA, in-house method	Not detected	Conforms
Deoxyribonucleases	Fluorimetric assay, in-house method	< LOQ (LOQ – 2.04 ng/mL)	Conforms
Ribonucleases	Fluorimetric assay, in-house method	< LOQ (LOQ – 0.06 ng/mL)	Conforms
Endotoxins	Chromogenic kinetic method; USP <85> Bacterial endotoxin test; Ph. Eur. 2.6.14, Bacterial endotoxin test, Method D	< 10.0 EU/mg protein	0.0 EU/mg protein
Residual host cell proteins	ELISA, in-house method	< 100.0 ng/mg protein (LOQ – 5.28 ng/mL)	0.0 ng/mg protein
Microbial contamination	Membrane filtration method, Ph. Eur. 2.6.12; USP <61>	Total Aerobic Microbial Count (TAMC): < 5 CFU/10 mL	Conforms
		Total Yeast and Mold Count (TYMC): < 5 CFU/10 mL	Conforms

**ISO CERTIFICATION**

Manufactured by Thermo Fisher Scientific Baltics UAB, in compliance with ISO 9001 and ISO 13485 certified quality management system.

**CoA is issued by**

Quality Assurance Department	Signature	Date
------------------------------	-----------	------

**CoA is verified and approved by**

Quality Assurance Manager	Signature	Date
---------------------------	-----------	------