

Certificate of Analysis

Product information

Lot number:	Z071-092024
Storage temperature:	-20°C
Storage conditions:	50 mM Tris-HCl, 100 mM NaCl, 20 mM DTT, 1 mM EDTA, 50% glycerol, 0.1% Triton X-100, pH 7.9
Document version:	COA_Z071_092024_v1

Specifications

Assay	Description	Threshold values	Z071-92024
Purity	Evaluated by SDS-PAGE, where the integrated peak area of the RNA Polymerase is compared to other protein peaks in the same lane.	>95%	99%
Proteinases	Assessed using Pierce™ Fluorescent Protease Assay Kit (ThermoFisher Scientific) following the manufacturer's guidelines.	<50 ng/ml	11.3
RNases	Assessed using the RNase Alert kit (Integrated DNA Technologies), following the manufacturer's guidelines.	<100 RFU	84.4
Double-stranded endonucleases	2.5 µl of the T7 RNAP are incubated with 1 µg of supercoiled plasmid DNA for 0 hours, 4 hours at 37°C and 16 hours at room temperature and analyzed by agarose gel.	No degradation detected.	Pass
Double-stranded exonucleases	2.5 µl of the T7 RNAP are incubated with 0.5 µg of linearized double-stranded DNA substrate for 0 hours, 4 hours at 37°C and 16 hours at room temperature and analyzed by agarose gel.	No degradation detected.	Pass
Single-stranded exonucleases	2.5 µl of the T7 RNAP are incubated with 1 µg of ssDNA substrate (calf-thymus DNA) for 0 hours, 4 hours at 37°C and 16 hours at room temperature and analyzed by agarose gel.	No degradation detected.	Pass
Full-length transcripts	Analysis of % of full-length RNA transcripts vs abortive transcripts using a Bioanalyzer Agilent RNA 6000 Nano Kit.	>50%	Pass