

	Certificate of Analysis	COA No: CA_SUP-0005 (CA_XBN-0006-2)
		Version: 01

dATP 100mM (Sodium) Suitable for Research and further Manufacturing Use	Catalog No:	MDX063
	Lot No:	B116700
	Storage Conditions:	-20°C
	Component Lot No:	B116700
	Retest date:	May 2025

Quality Control Parameters

Characteristics	Specification	Result
Concentration (at λ_{max} , pH 7.0, $\epsilon = 15.4 \text{ E} \times \text{mmol}^{-1} \times \text{cm}^{-1}$)	100 mM $\pm$ 5%	99 mM
pH of Solution (at 20°C)	7.5 – 8.0	7.0
Purity dATP (HPLC Area % at λ_{max})	$\geq 99\%$	99.4%

Analysis	Specification	Result
Functional	A 3Kb Lambda DNA fragment is amplified with a dilution series of dATP, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection $2.5 \times 10^{-3} \text{ U DNase}$.	Passed
RNase	Quantitative PCR analysis with high and low RNase standards. Test sample must show less RNase activity than the limit of detection $9.7 \times 10^{-3} \text{ ng}/\mu\text{L RNase}$.	Passed
Nicking Activity	Incubation of dATP with supercoiled control plasmid. Analysed by agarose gel electrophoresis. Test sample does not show an increase of linearized or relaxed plasmid.	Passed

QA / QC Representative:



Andrew Galeeba-M

Date: 3rd July 2023

United Kingdom

Tel: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822

USA

Tel: +1 901.382.8716
Fax: +1 901.382.0027

Germany

Tel: +49 (0)3371 60222 00
Fax: +49 (0)3371 60222 01