

New England Biolabs Certificate of Analysis

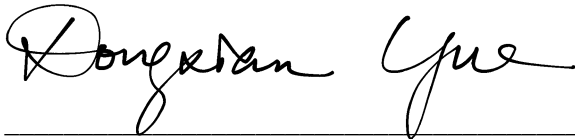
Product Name: 5-Methyl-Cytidine-5'-Triphosphate (5-Methyl-CTP)
Catalog Number: N0432S
Concentration: 100 mM
Packaging Lot Number: 10256648
Expiration Date: 08/2026
Storage Temperature: -20°C
Storage Conditions: Supplied as sodium salts, aqueous solution, pH 7.3
Specification Version: PS-N0432S v1.0

5-Methyl-Cytidine-5'-Triphosphate (5-Methyl-CTP) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0432SVIAL	5-Methyl-Cytidine-5'-Triphosphate (5-Methyl-CTP)	10252679	Pass

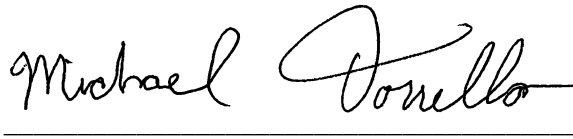
Assay Name/Specification	Lot # 10256648
Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 500 nmol of 5-Methyl-Cytidine-5'-Triphosphate incubated for 16 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Functional Testing (High Yield RNA Synthesis using Modified Nucleotides) A 20 µl reaction in transcription reaction buffer containing 1 µg CLuc Control Template, 2 µl T7 RNA Polymerase Mix, and 10 mM ribonucleotides (each) incubated for 2 hours at 37°C yields ≥ 150 µg RNA transcript. Only one modified NTP is assayed per reaction. The modified NTP is fully substituted in place of the unmodified counterpart NTP.	Pass
Physical Purity (HPLC) 5-Methyl-Cytidine-5'-Triphosphate is ≥ 95% pure as determined by HPLC analysis.	Pass
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 100 nmol of 5-Methyl-Cytidine-5'-Triphosphate is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass

This product has been tested and shown to be in compliance with all specifications.

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Dongxian Yue
Production Scientist
15 Aug 2024



Michael Tonello
Packaging Quality Control Inspector
27 Aug 2024