

New England Biolabs Certificate of Analysis

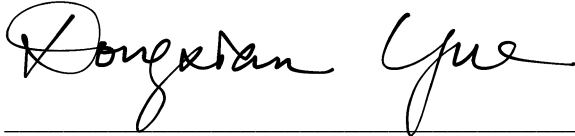
Product Name: *Pseudouridine-5'-Triphosphate (Pseudo-UTP)*
Catalog Number: *N0433S*
Concentration: *100 mM*
Packaging Lot Number: *10256649*
Expiration Date: *08/2026*
Storage Temperature: *-20°C*
Storage Conditions: *Supplied as sodium salts, aqueous solution, pH 7.0*
Specification Version: *PS-N0433S v1.0*

Pseudouridine-5'-Triphosphate (Pseudo-UTP) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0433SVIAL	Pseudouridine-5'-Triphosphate (Pseudo-UTP)	10252680	Pass

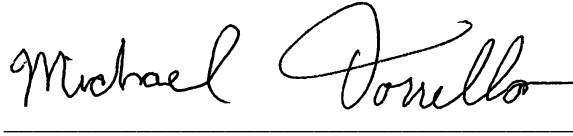
Assay Name/Specification	Lot # 10256649
Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 500 nmol of Pseudouridine-5'-Triphosphate incubated for 16 hours at 37°C results in <10% conversion to the nicked form as determined by agarose 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) Pseudouridine-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 Pseudouridine-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