

New England Biolabs Certificate of Analysis

Product Name: 3'-Desthiobiotin-GTP
Catalog Number: N0761S
Concentration: 5 mM
Packaging Lot Number: 10179190
Expiration Date: 02/2026
Storage Temperature: -20°C
Specification Version: PS-N0761S v1.0
Composition (1X): Supplied in Ultrapure water as a Triethylammonium salt (pH 7.0).

3'-Desthiobiotin-GTP Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0761SVIAL	3'-Desthiobiotin-GTP	10177409	Pass

Assay Name/Specification	Lot # 10179190
Concentration (A260) The concentration of 3'-Desthiobiotin-GTP is between 5 and 5.5 mM as determined by UV absorption at 260 nm.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 nmoles of 3'-Desthiobiotin-GTP incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Functional Testing (Capping, 3'DTB-GTP) A 20 µl reaction in Capping Buffer containing 0.5 mM 3'-Desthiobiotin-GTP, 0.1 mM SAM, 62.5 ng of a 25 mer RNA transcript, 20 units of Vaccinia Capping Enzyme and 0.05 units of Yeast Inorganic Pyrophosphatase incubated for 30 minutes at 37°C results in >90% capped transcript as determined by gel electrophoresis.	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 5 nmoles of 3'-Desthiobiotin-GTP 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
Physical Purity (HPLC) 3'-Desthiobiotin-GTP is ≥ 95% pure as determined by HPLC analysis.	Pass

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

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Production Scientist
24 Jan 2023



Michael Tonello
Packaging Quality Control Inspector
10 Feb 2023