

New England Biolabs Certificate of Analysis

Product Name: 3'-Desthiobiotin-GTP
Catalog Number: N0761S
Concentration: 5 mM
Lot Number: 10033109
Expiration Date: 12/2021
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	10033110	Pass

Assay Name/Specification	Lot # 10033109
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
Physical Purity (HPLC) 3'-Desthiobiotin-GTP 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 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

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



Bhairavi Jani
Production Scientist
26 Dec 2018



Josh Hersey
Packaging Quality Control Inspector
26 Dec 2018