

New England Biolabs Certificate of Analysis

Product Name: 3'-Biotin-GTP
Catalog #: N0760S
Concentration: 5 mM
Lot #: 0011704
Assay Date: 04/2017
Expiration Date: 04/2020
Storage Temp: -20°C
Composition (1X): Supplied in Ultrapure water as a Triethylammonium salt (pH 7.0).
Specification Version: PS-N0760S v1.0
Effective Date: 22 Mar 2017

Assay Name/Specification (minimum release criteria)	Lot #0011704
Concentration (A260) - The concentration of 3'-Biotin-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'-Biotin-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'-Biotin-GTP) - A 20 µl reaction in Capping Buffer containing 0.5 mM 3'-Biotin-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'-Biotin-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'-Biotin-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



Authorized by
Derek Robinson
22 Mar 2017



Inspected by
Bhairavi Jani
20 Apr 2017

