

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name:	3'-Biotin-GTP
Catalog Number:	N0760S
Concentration:	5 mM
Packaging Lot Number:	10121348
Expiration Date:	08/2024
Storage Temperature:	-20°C
Specification Version:	PS-N0760S v1.0
Composition (1X):	Supplied in Ultrapure water as a Triethylammonium salt (pH 7.0).

3'-Biotin-GTP Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
N0760SVIAL	3'-Biotin-GTP	10117416	Pass	

Assay Name/Specification	Lot # 10121348
<b>Physical Purity (HPLC)</b> 3'-Biotin-GTP is $\ge$ 95% pure as determined by HPLC analysis.	Pass
<b>RNase Activity (Extended Digestion)</b> 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
<b>Functional Testing (Capping, 3'-Biotin-GTP)</b> 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
<b>Endonuclease Activity (Nicking)</b> 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
<b>Concentration (A260)</b> The concentration of 3'-Biotin-GTP is between 5 and 5.5 mM as determined by UV absorption at 260 nm.	Pass





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

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Bhairavi Jani Production Scientist 05 Oct 2021

Josh Hersey

Packaging Quality Control Inspector 05 Oct 2021

