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## New England Biolabs Certificate of Analysis

Product Name: SARS-CoV-2 Positive Control (N gene)

Catalog Number: N2117S
Packaging Lot Number: 10122707
Expiration Date: 02/2023
Storage Temperature: -20°C
Storage Conditions: Proprietary
Specification Version: PS-N2117S v2.0

SARS-CoV-2 Positive Control (N gene) Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
N2117SVIAL	SARS-CoV-2 Positive Control (N gene)	10100711	Pass	

Assay Name/Specification	Lot # 10122707
A260/A280 Assay The ratio of UV absorption of SARS-CoV-2 Positive Control (N gene) at 260 and 280 nm is between 1.8 and 2.0.	Pass
Restriction Digest (Linearization) A 50 μl reaction in CutSmart® Buffer containing 5 μg of SARS-CoV-2 Positive Control (N gene) and 20 units of Xhol incubated for 1 hour at 37°C produces > 95% linearization resulting in a single band of approximately 4021 bp as determined by agarose gel electrophoresis.	Pass
Non-Specific DNase Activity (DNA, 16 hour) A 50 µl reaction in 1X NEBuffer 2 containing 5 µg of SARS-CoV-2 Positive Control (N gene) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
DNA Concentration (qPCR, Control DNA) SARS-CoV-2 Positive Control (N gene) is quantified using qPCR. Triplicate, 20 $\mu$ l reactions are run on SARS-CoV-2 Positive Control (N gene), six DNA standards, and no template controls for 40 cycles of PCR amplification, resulting in a standard curve with a calculated PCR efficiency of 90-110% and R2 value $\geq$ 0.99, and a $\Delta$ Cq >10 between the sample and no template controls. For each new lot tested, the difference in Cq between the new lot and the standard 3 is <1 Cq. For each new lot tested, the difference in Cq between the new lot and the control lot is <1 Cq.	Pass
Functional Testing (qPCR, SARS-CoV-2)	Pass



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

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Packaging Quality Co

Packaging Quality Control Inspector 22 Sep 2021

