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New England Biolabs
Product Specification

Product Name:	*SARS-CoV-2 Positive Control (N gene)*
Catalog #:	*N2117B*
Shelf Life:	*24 months*
Storage Temp:	*-20°C*
Storage Conditions:	*Proprietary*
Specification Version:	*PS-N2117B v1.0*
Effective Date:	*15 Jun 2021*

Assay Name/Specification (minimum release criteria)
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.
DNA Concentration (qPCR, Control DNA) - SARS-CoV-2 Positive Control (N gene) is quantified using qPCR. Triplicate, 20 µl 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 ≥0.99, and a ΔCq >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.
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.
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 XhoI 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.

Date 15 Jun 2021

Derek Robinson
Director, Quality Control