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

New England Biolabs Product Specification

Product Name: NEBNext® ARTIC SARS-CoV-2 Library Prep Kit (Illumina®)

Catalog #: E7650S/L

Kit Components: LunaScriptTM RT SuperMix (E7651) — Store at -20°C

Q5® Hot Start High-Fidelity 2X Master Mix (E7652) — Store at -20°C NEBNext® ARTIC SARS-CoV-2 Primer Mix 1 (E7725) — Store at -20°C NEBNext® ARTIC SARS-CoV-2 Primer Mix 2 (E7726) — Store at -20°C NEBNext® ARTIC Human Control Primer Pairs 1 (E7727) — Store at -20°C NEBNext® ARTIC Human Control Primer Pairs 2 (E7728) — Store at -20°C NEBNext® Ultra II™ End Prep Enzyme Mix (E7653) — Store at -20°C NEBNext® Ultra II™ End Prep Reaction Buffer (E7654) — Store at -20°C NEBNext® Ultra II™ Ligation Master Mix (E7655) — Store at -20°C NEBNext® Ultra II™ Ligation Master Mix (E7656) — Store at -20°C NEBNext® Library PCR Master Mix (E7656) — Store at -20°C

0.1X TE (E7657) — Store at -20°C

Nuclease-free Water (E7667) — Store at -20°C

NEBNext® Sample Purification Beads (E7659) — Store at 25°C

Shelf Life: 12 months
Storage Temp: Multi-temp

Specification Version: PS-E7650S/L v1.0
Effective Date: 18 Feb 2021

Assay Name/Specification (minimum release criteria)

Functional Testing (Library Construction, ARTIC UII DNA) - Each set of reagents is functionally validated through construction of libraries made from 1000 copies of commercially available SARS-CoV-2 RNA in a background of 100ng of human reference RNA. The amplified cDNA used in library construction is not fragmented resulting in a final average library size of between 450 bp and 600 bp as determined by an Agilent Bioanalyzer® or TapeStation®. Libraries are sequenced together on an Illumina® flow cell and assessed across various metrics including library yield, mapping rate to the SARS-CoV-2 genome and amplicon coverage. For 0.5 million paired end reads, all expected amplicons are covered by at least 100 overlapping reads.

* Individual Product Component Note - Standard Quality Control Tests are performed for each component included in NEBNext® ARTIC SARS-CoV-2 Library Prep Kit (Illumina®) and meet the designated specifications.







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Date 18 Feb 2021

Derek Robinson Director, Quality Control





