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 FS Library Prep Kit (Illumina®)

Catalog #: E7658S/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® VarSkip Short v2 SARS-CoV-2 Primer Mix 1 (E7872) — Store at -20°C

NEBNext® VarSkip Short v2 SARS-CoV-2 Primer Mix 2 (E7873) — Store at -20°C

NEBNext® Ultra IITM FS Enzyme Mix (E7668) — Store at -20°C NEBNext® Ultra IITM FS Reaction Buffer (E7669) — Store at -20°C NEBNext® Ultra IITM Ligation Master Mix (E7655) — 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-temperature

Specification Version: PS-E7658S/L v3.0

Effective Date: 15 Feb 2022

Assay Name/Specification (minimum release criteria)

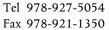
Functional Testing (Library Construction, ARTIC FS DNA) - Each set of reagents is functionally validated through construction of libraries made from 1000 copies of commercially available SARS-CoV-2 RNA in a background of 100ng of human reference RNA. A fragmentation time of 30 minutes is used to generate an insert size of approximately 100 bp. The final average library size is between 200 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 FS Library Prep Kit (Illumina®) and meet the designated specifications.









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Date 15 Feb 2022

Derek Robinson Director, Quality Control





