

## New England Biolabs Product Specification

<i>Product Name:</i>	NEBNext <sup>®</sup> ARTIC SARS-CoV-2 FS Library Prep Kit (Illumina <sup>®</sup> )
<i>Catalog #:</i>	E7658S/L
<i>Kit Components:</i>	LunaScript <sup>™</sup> RT SuperMix (E7651) — Store at -20°C Q5 <sup>®</sup> Hot Start High-Fidelity 2X Master Mix (E7652) — Store at -20°C NEBNext <sup>®</sup> ARTIC SARS-CoV-2 Primer Mix 1 (E7725) — Store at -20°C NEBNext <sup>®</sup> ARTIC SARS-CoV-2 Primer Mix 2 (E7726) — Store at -20°C NEBNext <sup>®</sup> ARTIC Human Control Primer Pairs 1 (E7727) — Store at -20°C NEBNext <sup>®</sup> ARTIC Human Control Primer Pairs 2 (E7728) — Store at -20°C NEBNext <sup>®</sup> Ultra II <sup>™</sup> FS Enzyme Mix (E7668) — Store at -20°C NEBNext <sup>®</sup> Ultra II <sup>™</sup> FS Reaction Buffer (E7669) — Store at -20°C NEBNext <sup>®</sup> Ultra II <sup>™</sup> Ligation Master Mix (E7655) — Store at -20°C NEBNext <sup>®</sup> 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 <sup>®</sup> Sample Purification Beads (E7659) — Store at 25°C
<i>Shelf Life:</i>	12 months
<i>Storage Temp:</i>	Multi-temp
<i>Specification Version:</i>	PS-E7658S/L v1.0
<i>Effective Date:</i>	18 Feb 2021

### 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<sup>®</sup> or TapeStation<sup>®</sup>. Libraries are sequenced together on an Illumina<sup>®</sup> 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<sup>®</sup> ARTIC SARS-CoV-2 FS Library Prep Kit (Illumina<sup>®</sup>) and meet the designated specifications.



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Date 18 Feb 2021

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