

## New England Biolabs Certificate of Analysis

Product Name: NEBNext<sup>®</sup> Ultra<sup>™</sup> II FS DNA Library Prep Kit for Illumina<sup>®</sup>  
 Catalog Number: E7805S  
 Packaging Lot Number: 10175404  
 Expiration Date: 09/2023  
 Storage Temperature: -20°C  
 Specification Version: PS-E7805S/L v1.0

| NEBNext <sup>®</sup> Ultra <sup>™</sup> II FS DNA Library Prep Kit for Illumina <sup>®</sup> Component List |                                                                       |            |                      |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------|----------------------|
| NEB Part Number                                                                                             | Component Description                                                 | Lot Number | Individual QC Result |
| E7808AVIAL                                                                                                  | TE Buffer                                                             | 10161375   | Pass                 |
| E7807AVIAL                                                                                                  | NEBNext <sup>®</sup> Ultra <sup>™</sup> II FS Reaction Buffer         | 10161374   | Pass                 |
| E7806AVIAL                                                                                                  | NEBNext <sup>®</sup> Ultra <sup>™</sup> II FS Enzyme Mix              | 10161373   | Pass                 |
| E7649AVIAL                                                                                                  | NEBNext <sup>®</sup> Ultra <sup>™</sup> II Q5 <sup>®</sup> Master Mix | 10161372   | Pass                 |
| E7648AVIAL                                                                                                  | NEBNext <sup>®</sup> Ultra <sup>™</sup> II Ligation Master Mix        | 10161371   | Pass                 |
| E7374AVIAL                                                                                                  | NEBNext <sup>®</sup> Ligation Enhancer                                | 10161370   | Pass                 |

| Assay Name/Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lot # 10175404          |
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| <p><b>* Individual Product Component Note</b><br/>           Standard Quality Control Tests are performed for each component included in NEBNext<sup>®</sup> Ultra<sup>™</sup> II FS DNA Library Prep Kit for Illumina<sup>®</sup> and meet the designated specifications.</p> <p><b>Functional Testing (Library Construction, FS DNA)</b><br/>           Each set of reagents is functionally validated and compared to the previous lot through construction of libraries made from commercially available genomic DNA, using the kit's minimum and maximum input requirements. A fragmentation time of 20 minutes was used to generate an insert size of approximately 200 bp. The final average library size is between 270 and 450 bp as determined by an Agilent Bioanalyzer. Libraries made from the previous and current lots for both input DNA amounts are sequenced together on the same Illumina flow cell and compared across various metrics including library yield, fraction of reads aligning to the reference, GC bias, and insert size.</p> | <p>Pass</p> <p>Pass</p> |

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

*Christine Sumner*

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Christine Sumner  
Production Scientist  
19 Dec 2022

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
19 Dec 2022