

## New England Biolabs Product Specification

*Product Name:* NEBNext<sup>®</sup> Enzymatic Methyl-seq Conversion Module  
*Catalog #:* E7125S/L/G  
*Kit Components:* Control DNA CpG Methylated pUC19 (E7122)  
Control DNA CpG Unmethylated Lambda (E7123)  
NEBNext<sup>®</sup> Ultra<sup>™</sup> II End Prep Reaction Buffer (E7647)  
NEBNext<sup>®</sup> Ultra<sup>™</sup> II End Prep Enzyme Mix (E7646)  
NEBNext<sup>®</sup> Ultra<sup>™</sup> II Ligation Master Mix (E7648)  
NEBNext<sup>®</sup> Ligation Enhancer (E7374)  
Elution Buffer (E7124)  
TET2 Reaction Buffer (E7126)  
TET2 Reaction Buffer Supplement (E7127)  
Oxidation Supplement (E7128)  
Oxidation Enhancer (E7129)  
TET2 (E7130)  
Fe (II) Solution (E7131)  
Stop Reagent (E7132)  
APOBEC (E7133)  
APOBEC Reaction Buffer (E7134)  
BSA (E7135)

*Shelf Life:* 12 months  
*Storage Temp:* -20°C  
*Specification Version:* PS-E7125S/L/G v1.0  
*Effective Date:* 21 Mar 2019

### Assay Name/Specification (minimum release criteria)

**Functional Testing (Library Construction)** - Each set of reagents is functionally validated and compared to the previous lot through construction of libraries made from genomic DNA and DNA controls (CpG methylated pUC19 and unmethylated Lambda), that are required for assessment of 5mC and 5hmC. The kit's minimum and maximum DNA input requirements are used to make libraries that are sequenced on the same Illumina<sup>®</sup> flow cell. Library assessment is based on metrics including library yields, GC bias, insert size, and the percent 5mC/5hmC detected for CpG, CHG, CHH contexts within the genomic DNA and internal controls.



---

## New England Biolabs Product Specification

Assay Name/Specification (minimum release criteria)

\* **Individual Product Component Note** - Standard Quality Control Tests are performed for each component included in NEBNext<sup>®</sup> Enzymatic Methyl-seq Conversion Module and meet the designated specifications.



Date 21 Mar 2019

---

Derek Robinson  
Director of Quality Control

