

# LIBRARY PREPARATION

## NEBNext<sup>®</sup> Singleplex Oligos for Illumina<sup>®</sup>

### Instruction Manual

NEB #E7350S/L  
12/60 reactions  
Version 5.0 7/18



*be* INSPIRED  
*drive* DISCOVERY  
*stay* GENUINE

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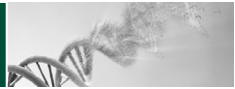


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The NEBNext  
Singleplex Oligos for Illumina Includes:

*The volumes provided are sufficient for preparation of up to 12 reactions (NEB #E7350S) and 60 reactions (NEB #E7350L). All reagents should be stored at -20°C. Please note that only 1 Index Primer is included in this kit. Libraries made with Index 1 cannot be pooled and run together. If index primers are required, another NEBNext indexing kit for Illumina should be ordered instead.*

- NEBNext Adaptor for Illumina
- USER® Enzyme
- NEBNext Universal PCR Primer for Illumina
- NEBNext Index 1 Primer for Illumina

*For the list of additional materials required, please check the manual for your NEBNext Library Prep Kit.*

## Applications:

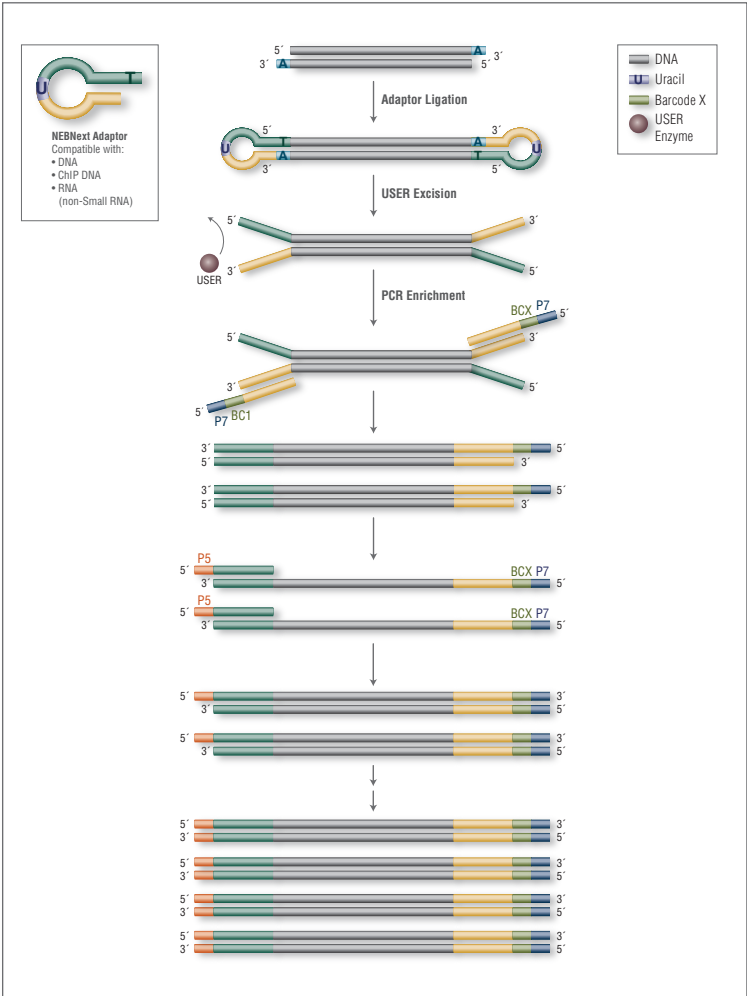
The NEBNext Singleplex Oligos for Illumina contains adaptors and primers that are ideally suited for sample preparation for next-generation sequencing on the Illumina platform (Illumina, Inc.). Each of these components must pass rigorous quality control standards and is lot controlled, both individually and as a set of reagents.

**Lot Control:** The lots provided in the NEBNext Singleplex Oligos for Illumina are managed separately and are qualified by additional functional validation. Individual reagents undergo standard enzyme activity and quality control assays, and also meet stringent criteria in the additional quality controls listed on each individual component page.

**Functionally Validated:** Each set of reagents is functionally validated together through construction and sequencing of genomic DNA libraries as well as human mRNA libraries and ChIP Seq libraries on the Illumina platform.

For larger volume requirements, customized and bulk packaging is available by purchasing through the OEM/Bulks department at NEB. Please contact [OEM@neb.com](mailto:OEM@neb.com) for further information.

Figure 1: Workflow demonstrating the use of NEBNext Singleplex Oligos for Illumina.



## Please Refer to the Kit Specific Protocol for using the NEBNext Singleplex Oligos for Illumina:

The following kits are designed for use with the NEBNext Singleplex Oligos for Illumina:

- #E7645, NEBNext Ultra II DNA Library Prep Kit for Illumina
- #E7595, NEBNext Ultra II Ligation Module
- #E7420, NEBNext Ultra Directional RNA Library Prep Kit for Illumina
- #E7530, NEBNext Ultra RNA Library Prep Kit for Illumina
- #E7370, NEBNext Ultra DNA Library Prep Kit for Illumina
- #E7445, NEBNext Ultra Ligation Module
- #E6040, NEBNext DNA Library Prep Master Mix Set for Illumina
- #E6240, NEBNext ChIP-Seq Library Prep Master Mix Set for Illumina
- #E6056, NEBNext Quick Ligation Module
- #E7760, NEBNext Ultra II Directional RNA Library Prep Kit for Illumina
- #E7770, NEBNext Ultra II RNA Library Prep Kit for Illumina
- #E7765, NEBNext Ultra II Directional RNA Library Prep with Sample Purification Beads
- #E7775, NEBNext Ultra II RNA Library Prep with Sample Purification Beads
- #E7103, NEBNext Ultra II DNA Library Prep with Sample Purification Beads
- #E7805, NEBNext Ultra II FS DNA Library Prep Kit for Illumina
- #E6177, NEBNext Ultra II FS DNA Library Prep Kit with Sample Purification Beads

# NEBNext Adaptors and Primers for Illumina

PRODUCT	INDEX PRIMER SEQUENCE	EXPECTED INDEX PRIMER SEQUENCE READ
NEBNext Index 1 Primer for Illumina	5'-CAAGCAGAAGACGGCATACGAGAT <b>CGTGAT</b> GTGACTG GAGTTCAGACGTGTGCTCTTCCGATC*T-3'	ATCACG
NEBNext Adaptor for Illumina	5'-/5Phos/GAT CGG AAG AGC ACA CGT CTG AAC TCC AGT CdUA CAC TCT TTC CCT ACA CGA CGC TCT TCC GAT C*T-3'	N/A
NEBNext Universal PCR Primer for Illumina	5'-AAT GAT ACG GCG ACC ACC GAG ATC TAC ACT CTT TCC CTA CAC GAC GCT CTT CCG ATC*T-3'	N/A

Where \* indicates phosphorothioate bond.

# Kit Components

## NEB #E7350S Table of Components

NEB #	PRODUCT	VOLUME
E7352A	NEBNext Adaptor for Illumina	0.12 ml
E7353A	USER Enzyme	0.036 ml
E7357A	NEBNext Universal PCR Primer for Illumina	0.06 ml
E7356A	NEBNext Index 1 Primer for Illumina	0.060 ml

## NEB #E7350L Table of Components

NEB #	PRODUCT	VOLUME
E7352AA	NEBNext Adaptor for Illumina	0.60 ml
E7353AA	USER Enzyme	0.180 ml
E7357AA	NEBNext Universal PCR Primer for Illumina	0.300 ml
E7356AA	NEBNext Index 1 Primer for Illumina	0.300 ml

## Revision History:

REVISION #	DESCRIPTION	DATE
3.0	Change Index Primer and Universal Primer concentration from 25 $\mu$ M to 10 $\mu$ M. All part #'s have changed. Concentrations of Universal PCR Primer and Index Primers have changed from 25 $\mu$ M to 10 $\mu$ M.	1/15
4.0	Create "Kit Component – Table of Components" for small and large size kits. Delete individual component information pages.	4/18
5.0	Delete required materials not included. Add list of kits are designed for use with the NEBNext Singleplex Oligos. Add page for NEBNext Adaptors and Primers for Illumina.	7/18



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