



# ThruPLEX<sup>®</sup> DNA-seq Kit Instruction Manual

High Performance Library Preparation  
for Illumina<sup>®</sup> NGS Platforms

Research Use Only

## Product Use Limitations

ThruPLEX® DNA-seq Kit is intended for **Research Use Only**. It may not be used for any other purposes including, but not limited to, use in diagnostics, forensics, therapeutics, or in humans. ThruPLEX DNA-seq may not be transferred to third parties, resold, modified for resale or used to manufacture commercial products without prior written approval of Rubicon Genomics, Inc.

**\*Protected by U.S. Patents 7,803,550; 8,071,312; 8,399,199; 8,728,737 and corresponding foreign patents. Additional patents are pending.**

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## Product Description

ThruPLEX® DNA-seq builds on the innovative ThruPLEX chemistry to generate DNA libraries with expanded multiplexing capability and with even greater diversity. Kits contain up to 96 Illumina-compatible indexes. ThruPLEX DNA-seq can be used in DNA-seq, RNA-seq, or ChIP-seq and offers robust target enrichment performance with all of the leading platforms. For more information, please visit: <http://rubicongenomics.com/products/thruplex-dna-seq-kit/>.

## Kit Contents

ThruPLEX DNA-seq Kit contains sufficient reagents to prepare up to the specified number of reactions. Enough buffers and enzymes are provided for 4 uses or freeze-thaw cycles. Contents of ThruPLEX DNA-seq Kit are not interchangeable with other Rubicon Genomics products.

**Table 1: ThruPLEX DNA-seq Kit Contents – Single Index Kits**

Name	Cap Color	6S Kit (12 Rxn) R400523 6 Single Indexes 12 Reactions	12S Kit (48 Rxn) R400428 12 Single Indexes 48 Reactions	48S Kit R400427 48 Single Indexes 48 Reactions
Template Preparation Buffer	Red	1 Tube	1 Tube	1 Tube
Template Preparation Enzyme	Red	1 Tube	1 Tube	1 Tube
Library Synthesis Buffer	Yellow	1 Tube	1 Tube	1 Tube
Library Synthesis Enzyme	Yellow	1 Tube	1 Tube	1 Tube
Library Amplification Buffer	Green	1 Tube	1 Tube	1 Tube
Library Amplification Enzyme	Green	1 Tube	1 Tube	1 Tube
Nuclease-Free Water	Clear	1 Tube	1 Tube	1 Tube
Indexing Reagents	Blue	6 Tubes	12 Tubes	1 Single Index Plate (48S)
Quick Protocol				

**Table 2: ThruPLEX DNA-seq Kit Contents – Dual Index Kits**

Name	Cap Color	48D Kit R400406 48 Dual Indexes 48 Reactions	96D Kit R400407 96 Dual Indexes 96 Reactions
Template Preparation Buffer	Red	1 Tube	2 Tubes
Template Preparation Enzyme	Red	1 Tube	2 Tubes
Library Synthesis Buffer	Yellow	1 Tube	2 Tubes
Library Synthesis Enzyme	Yellow	1 Tube	2 Tubes
Library Amplification Buffer	Green	1 Tube	2 Tubes
Library Amplification Enzyme	Green	1 Tube	2 Tubes
Nuclease-Free Water	Clear	1 Tube	1 Tube
Indexing Reagents		1 Dual Index Plate (48B or 48D)	1 Dual Index Plate (96A or 96D)
Quick Protocol			

- **Note:** Dual Index Plates (48B) and (48D) are identical; Dual Index Plates (96A) and (96D) are also identical.

### Shipping and Storage

ThruPLEX DNA-seq Kit is shipped on dry ice. The kit should be stored at  $-20^{\circ}\text{C}$  upon arrival.

### Quality Control

ThruPLEX DNA-seq Kit is functionally tested using Next Generation Sequencing (NGS) to ensure product quality and consistency.

### Safety Information

Follow standard laboratory safety procedures and wear a suitable lab coat, protective goggles and disposable gloves to ensure personal safety as well as to limit potential cross contaminations during the sample preparation and subsequent amplification reactions. For more information, please refer to the appropriate Material Safety Data Sheets (MSDS) available online at <http://rubicongenomics.com/resources/msds/>.

### Technical Assistance

For technical support with any of the Rubicon Genomics, Inc. products please contact technical support by email: [support@rubicongenomics.com](mailto:support@rubicongenomics.com) or call at (734)-677-4845 (9 AM – 5:30 PM EST).

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