

# ThruPLEX® Tag-seq Kit Index Guide

For more information on ThruPLEX® Tag-seq indexes and Index Plate handling instructions, refer to the ThruPLEX Tag-seq Instruction Manual at <http://rubicongenomics.com/resources/manuals/>.

**Technical Support:** Call (734) 677-4845 (9AM-5:30PM Eastern Time) or contact [support@rubicongenomics.com](mailto:support@rubicongenomics.com).

## ThruPLEX Tag-seq 6S Kit (CAT. NO. R400584)

### Single Index Sequences

Tube	Sequence
1	ATCACGTT
2	CGATGTTT
3	TTAGGCAT
4	TGACCACT
5	ACAGTGGT
6	GCCAATGT

ThruPLEX Tag-seq 6S Kit is provided with 6 Indexing Reagents pre-dispensed in tubes. Each tube has sufficient volume for up to 4 uses and contains an 8nt Sanger index that has the same sequence in the first 6 bases as the Illumina® TruSeq® LT indexes AD001 through AD006.

### Multiplexing and Index Pooling

Color balanced index combinations are only important for MiSeq® control software version 2.1 or earlier and the HiSeq® control software 2.0.12 or earlier. For pooling guidelines and for Illumina sequencing systems that require balanced index combinations, refer to Illumina's [TruSeq Library Prep Pooling Guide](#) (Illumina, Part # 15042173 v01, 2015).

## ThruPLEX Tag-seq 48S Kit (CAT. NO. R400585)

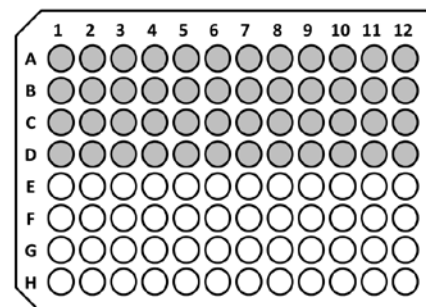
### Single Index Sequences

ThruPLEX Tag-seq 48S Kit is provided with a Single Index Plate (SIP) containing 48 Illumina-compatible single indexes, each with a unique 8nt Sanger index sequence. Each well has sufficient volume for a single use.

Well	Sequence	Well	Sequence	Well	Sequence	Well	Sequence
A1	ATCACGTT	B1	TGGTTGTT	C1	TGCGATCT	D1	GGCACAAC
A2	CGATGTTT	B2	TCTCGGTT	C2	TTCCTGCT	D2	TCTCACGG
A3	TTAGGCAT	B3	TAAGCGTT	C3	TAGTGA CT	D3	TCAGGAGG
A4	TGACCACT	B4	TCCGTCTT	C4	TACAGGAT	D4	TAAGTTCG
A5	ACAGTGGT	B5	TGTACCTT	C5	TCCTCAAT	D5	TCCAGTCG
A6	GCCAATGT	B6	TTCTGTGT	C6	TGTGGTTG	D6	TGTATGCG
A7	CAGATCTG	B7	TCTGCTGT	C7	TAGTCTTG	D7	TCATTGAG
A8	ACTTGATG	B8	TTGGAGGT	C8	TTCCATTG	D8	TGGCTCAG
A9	GATCAGCG	B9	TCGAGCGT	C9	TCGAAGTG	D9	TATGCCAG
A10	TAGCTTGT	B10	TGATACGT	C10	TAACGCTG	D10	TCAGATTC
A11	GGCTACAG	B11	GTGCTACC	C11	TTGGTATG	D11	TACTAGTC
A12	CTTGTACT	B12	GGTTGGAC	C12	TGAACTGG	D12	TTCAGCTC

### Single Index Plate (SIP) Map

The shaded wells in the Plate Map indicate well positions containing Indexing Reagents.



		Well	Sequence
3-plex	Option A	A1	ATCACGTT
		A7	CAGATCTG
		B12	GGTTGGAC
	Option B	A2	CGATGTTT
		A8	ACTTGATG
		D1	GGCACAAC
	Option C	A5	ACAGTGGT
		B11	GTGCTACC
		D10	TCAGATTC
	Option D	A12	CTTGTACT
		D11	TACTAGTC
		D12	TTCAGCTC
4-plex or greater	Use 3-plex options with any other available indexes		

### Multiplexing and Index Pooling

For Illumina sequencing systems that require balanced index combinations (MiSeq Control Software 2.1 or earlier and HiSeq Control Software 2.0.12 or earlier), select appropriate single indexes that are unique and meet Illumina recommended compatibility requirements. To ensure proper image registration on the sequencer, follow the low-plex pooling guidelines on the left. Refer to Illumina's [TruSeq Library Prep Pooling Guide](#) (Illumina, Part # 15042173 v01, 2015).

## ThruPLEX Tag-seq 96D Kit (CAT. NO. R400586)

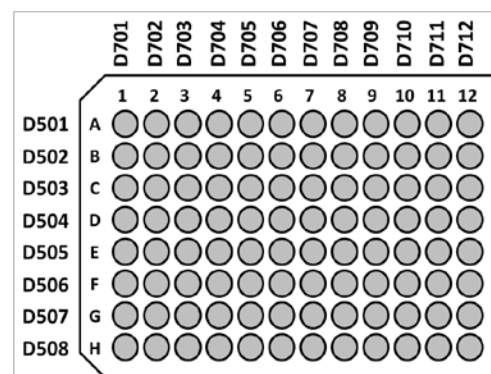
### Dual Index Sequences

ThruPLEX Tag-seq 96D Kit is provided with a Dual Index Plate (DIP) containing 96 Illumina-compatible dual indexes. Each well has sufficient volume for a single use and contains a unique combination of Illumina's 8nt TruSeq HT i5 and i7 index sequences.

i7 Index	Sequence	i5 Index	Sequence
D701	ATTACTCG	D501	TATAGCCT
D702	TCCGGAGA	D502	ATAGAGGC
D703	CGCTCATT	D503	CCTATCCT
D704	GAGATTCC	D504	GGCTCTGA
D705	ATTCAGAA	D505	AGGCGAAG
D706	GAATTCGT	D506	TAATCTTA
D707	CTGAAGCT	D507	CAGGACGT
D708	TAATGCGC	D508	GTA CTGAC
D709	CGGCTATG		
D710	TCCGCGAA		
D711	TCTCGCGC		
D712	AGCGATAG		

### Dual Index Plate (DIP) Map

The shaded wells in the Plate Map indicate well positions containing Indexing Reagents. Index combination at each well position is indicated by the column and row labels on the Plate Map.



### Multiplexing and Index Pooling

For Illumina sequencing systems that require balanced index combinations (Miseq Control Software 2.1 or earlier and HiSeq Control Software 2.0.12 or earlier), select appropriate dual index combinations that are unique and meet Illumina recommended compatibility requirements. In general, for pooling multiple samples, it is recommended to use indexes spanning as many columns and rows as possible to increase the diversity of the chosen combinations. For low-plex (2- to 16-plex) pooling guidelines and for Illumina sequencing systems that require balanced index combinations, refer to Illumina's [TruSeq Library Prep Pooling Guide](#) (Illumina, Part # 15042173 v01, 2015).

ThruPLEX<sup>®</sup> Tag-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 Tag-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. ThruPLEX Tag-seq Kit is 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.

The 8nt Sanger index sequences were developed by the Wellcome Trust Sanger Institute in Cambridge, UK; additional information can be found in *Nature Methods* **7**, 111 - 118 (2010). Index sequences correspond to Illumina Index sequences for multiplexing and are copyrighted to Illumina, Inc. Oligonucleotide sequences © 2007-2012 Illumina, Inc. All rights reserved. ThruPLEX<sup>®</sup> is a registered trademark of Rubicon Genomics, Inc. Illumina, MiSeq, HiSeq and TruSeq are a registered trademark of Illumina, Inc.