

TransNGS® UDI Primers (96) Kit for Illumina®

Please read the datasheet carefully prior to use.



Cat. No. KI251

Storage at -20 °C for two years

Description

TransNGS® UDI Primers (96) Kit for Illumina® is the Index primer kit for multiplex library preparation suitable for Illumina high-throughput sequencing platform. This kit contains 96 UDI Primers composed of different i5 Primers and i7 Primers, which can be used to prepare 96 different paired-end Index next-generation sequencing libraries.

Application

Multiplex next-generation sequencing library preparations on the Illumina platform.

Kit Contents

Component	KI251-00 (24rxns)	KI251-01 (192rxns)	KI251-02 (384rxns)
<i>TransNGS</i> ® UDI Primer	01-12 10 µl each	01-96 10 µl each	01-96 20 µl each

Sequence Information

TransNGS® i5 Primer:

5'-AATGATACGGCGACCAACGAGATCTACAC[i5]ACACTCTTTCCTACACGACGCTCTTCCGATC-s-T-3'

TransNGS® i7 Primer:

5'-CAAGCAGAAGACGGCATAACGAGAT[i7]GTGACTGGAGTTCAGACGTGTGCTCTTCCGATC-s-T-3'

i5: Index 2, 8 bases;

i7: Index 1, 8 bases;

-s- indicates a phosphothioate bond

The corresponding i5/i7 sequences in each primer and the Index sequence during sequencing are shown in the following table:

Primer Name	i5 Primers		i7 Primers
	Miseq, HiSeq 2000/2500, NovaSeq v1.0	MiniSeq, NextSeq, HiSeq 3000/4000, NovaSeq v1.5	All Illumina Systems
<i>TransNGS</i> ® UDI 01 Primer	A G C G C T A G	C T A G C G C T	C C G C G G T T
<i>TransNGS</i> ® UDI 02 Primer	G A T A T C G A	T C G A T A T C	T T A T A A C C
<i>TransNGS</i> ® UDI 03 Primer	C G C A G A C G	C G T C T G C G	G G A C T T G G
<i>TransNGS</i> ® UDI 04 Primer	T A T G A G T A	T A C T C A T A	A A G T C C A A
<i>TransNGS</i> ® UDI 05 Primer	A G G T G C G T	A C G C A C C T	A T C C A C T G
<i>TransNGS</i> ® UDI 06 Primer	G A A C A T A C	G T A T G T T C	G C T T G T C A
<i>TransNGS</i> ® UDI 07 Primer	A C A T A G C G	C G C T A T G T	C A A G C T A G
<i>TransNGS</i> ® UDI 08 Primer	G T G C G A T A	T A T C G C A C	T G G A T C G A
<i>TransNGS</i> ® UDI 09 Primer	C C A A C A G A	T C T G T T G G	A G T T C A G G
<i>TransNGS</i> ® UDI 10 Primer	T T G G T G A G	C T C A C C A A	G A C C T G A A
<i>TransNGS</i> ® UDI 11 Primer	C G C G G T T C	G A A C C G C G	T C T C T A C T
<i>TransNGS</i> ® UDI 12 Primer	T A T A A C C T	A G G T T A T A	C T C T C G T C
<i>TransNGS</i> ® UDI 13 Primer	A A G G A T G A	T C A T C C T T	C C A A G T C T
<i>TransNGS</i> ® UDI 14 Primer	G G A A G C A G	C T G C T T C C	T T G G A C T C
<i>TransNGS</i> ® UDI 15 Primer	T C G T G A C C	G G T C A C G A	G G C T T A A G
<i>TransNGS</i> ® UDI 16 Primer	C T A C A G T T	A A C T G T A G	A A T C C G G A



Primer Name	i5 Primers		i7 Primers
	Miseq, HiSeq 2000/2500, NovaSeq v1.0	MiniSeq, NextSeq, HiSeq 3000/4000, NovaSeq v1.5	All Illumina Systems
TransNGS® UDI 17 Primer	ATATTACAC	GTGAATAT	TAATACAG
TransNGS® UDI 18 Primer	GCGCCTGT	ACAGGCGC	CGGCGTGA
TransNGS® UDI 19 Primer	ACTCTATG	CATAGAGT	ATGTAAGT
TransNGS® UDI 20 Primer	GTCTCGCA	TGCGAGAC	GCACGGAC
TransNGS® UDI 21 Primer	AAGACGTC	GACGCTTT	GGTACCTT
TransNGS® UDI 22 Primer	GGAGTACT	AGTACTCC	AACGTTCC
TransNGS® UDI 23 Primer	ACCGGCCA	TGGCCGGT	GCAGAATT
TransNGS® UDI 24 Primer	GTTAATTG	CAATTAAC	ATGAGGCC
TransNGS® UDI 25 Primer	AACCGCGG	CCGCGGTT	ACTAAGAT
TransNGS® UDI 26 Primer	GGTTATAA	TTATAACC	GTCCGAGC
TransNGS® UDI 27 Primer	CCAAGTCC	GGACTTGG	CTTGGTAT
TransNGS® UDI 28 Primer	TTGGACTT	AAGTCCAA	TCCAACGC
TransNGS® UDI 29 Primer	CAGTGGAT	ATCCACTG	CCGTGAAG
TransNGS® UDI 30 Primer	TGACAAGC	GCTTGTC A	TTACAGGA
TransNGS® UDI 31 Primer	CTAGCTTG	CAAGCTAG	GGCATTCT
TransNGS® UDI 32 Primer	TCGATCCA	TGGATCGA	AATGCCTC
TransNGS® UDI 33 Primer	CCTGAAC T	AGTTCAGG	TACCGAGG
TransNGS® UDI 34 Primer	TTCAGGTC	GACCTGAA	CGTTAGAA
TransNGS® UDI 35 Primer	AGTAGAGA	TCTCTACT	AGCCTCAT
TransNGS® UDI 36 Primer	GACGAGAG	CTCTCGTC	GATTCTGC
TransNGS® UDI 37 Primer	AGACTTGG	CCAAGTCT	TCGTAGTG
TransNGS® UDI 38 Primer	GAGTCCAA	TTGGACTC	CTACGACA
TransNGS® UDI 39 Primer	CTTAAGCC	GGCTTAAG	TAAGTGGT
TransNGS® UDI 40 Primer	TCCGGATT	AATCCGGA	CGGACAAC
TransNGS® UDI 41 Primer	CTGTATTA	TAATACAG	ATATGGAT
TransNGS® UDI 42 Primer	TCACGCCG	CGGCGTGA	GCGCAAGC
TransNGS® UDI 43 Primer	ACTTACAT	ATGTAAGT	AAGATACT
TransNGS® UDI 44 Primer	GTCCGTGC	GCACGGAC	GGAGCGTC
TransNGS® UDI 45 Primer	AAGGTACC	GGTACCTT	ATGGCATG
TransNGS® UDI 46 Primer	GGAACGTT	AACGTTCC	GCAATGCA
TransNGS® UDI 47 Primer	AATTCTGC	GCAGAATT	GTTCCAAT
TransNGS® UDI 48 Primer	GGCCTCAT	ATGAGGCC	ACCTTGGC
TransNGS® UDI 49 Primer	ATCTTAGT	ACTAAGAT	ATATCTCG
TransNGS® UDI 50 Primer	GCTCCGAC	GTCCGAGC	GCGCTCTA
TransNGS® UDI 51 Primer	ATACCAAG	CTTGGTAT	AACAGGTT
TransNGS® UDI 52 Primer	GCGTTGGA	TCCAACGC	GGTGAAAC
TransNGS® UDI 53 Primer	CTTCACGG	CCGTGAA	CAACAATG



Primer Name	i5 Primers		i7 Primers
	Miseq, HiSeq 2000/2500, NovaSeq v1.0	MiniSeq, NextSeq, HiSeq 3000/4000, NovaSeq v1.5	All Illumina Systems
TransNGS® UDI 54 Primer	T C C T G T A A	T T A C A G G A	T G G T G G C A
TransNGS® UDI 55 Primer	A G A A T G C C	G G C A T T C T	A G G C A G A G
TransNGS® UDI 56 Primer	G A G G C A T T	A A T G C C T C	G A A T G A G A
TransNGS® UDI 57 Primer	C C T C G G T A	T A C C G A G G	T G C G G C G T
TransNGS® UDI 58 Primer	T T C T A A C G	C G T T A G A A	C A T A A T A C
TransNGS® UDI 59 Primer	A T G A G G C T	A G C C T C A T	G A T C T A T C
TransNGS® UDI 60 Primer	G C A G A A T C	G A T T C T G C	A G C T C G C T
TransNGS® UDI 61 Primer	C A C T A C G A	T C G T A G T G	C G G A A C T G
TransNGS® UDI 62 Primer	T G T C G T A G	C T A C G A C A	T A A G G T C A
TransNGS® UDI 63 Primer	A C C A C T T A	T A A G T G G T	T T G C C T A G
TransNGS® UDI 64 Primer	G T T G T C C G	C G G A C A A C	C C A T T C G A
TransNGS® UDI 65 Primer	A T C C A T A T	A T A T G G A T	A C A C T A A G
TransNGS® UDI 66 Primer	G C T T G C G C	G C G C A A G C	G T G T C G G A
TransNGS® UDI 67 Primer	A G T A T C T T	A A G A T A C T	T T C C T G T T
TransNGS® UDI 68 Primer	G A C G C T C C	G G A G C G T C	C C T T C A C C
TransNGS® UDI 69 Primer	C A T G C C A T	A T G G C A T G	G C C A C A G G
TransNGS® UDI 70 Primer	T G C A T T G C	G C A A T G C A	A T T G T G A A
TransNGS® UDI 71 Primer	A T T G G A A C	G T T C C A A T	A C T C G T G T
TransNGS® UDI 72 Primer	G C C A A G G T	A C C T T G G C	G T C T A C A C
TransNGS® UDI 73 Primer	C G A G A T A T	A T A T C T C G	C A A T T A A C
TransNGS® UDI 74 Primer	T A G A G C G C	G C G C T C T A	T G G C C G G T
TransNGS® UDI 75 Primer	A A C C T G T T	A A C A G G T T	A G T A C T C C
TransNGS® UDI 76 Primer	G G T T C A C C	G G T G A A C C	G A C G T C T T
TransNGS® UDI 77 Primer	C A T T G T T G	C A A C A A T G	T G C G A G A C
TransNGS® UDI 78 Primer	T G C C A C C A	T G G T G G C A	C A T A G A G T
TransNGS® UDI 79 Primer	C T C T G C C T	A G G C A G A G	A C A G G C G C
TransNGS® UDI 80 Primer	T C T C A T T C	G A A T G A G A	G T G A A T A T
TransNGS® UDI 81 Primer	A C G C C G C A	T G C G G C G T	A A C T G T A G
TransNGS® UDI 82 Primer	G T A T T A T G	C A T A A T A C	G G T C A C G A
TransNGS® UDI 83 Primer	G A T A G A T C	G A T C T A T C	C T G C T T C C
TransNGS® UDI 84 Primer	A G C G A G C T	A G C T C G C T	T C A T C C T T
TransNGS® UDI 85 Primer	C A G T T C C G	C G G A A C T G	A G G T T A T A
TransNGS® UDI 86 Primer	T G A C C T T A	T A A G G T C A	G A A C C G C G
TransNGS® UDI 87 Primer	C T A G G C A A	T T G C C T A G	C T C A C C A A
TransNGS® UDI 88 Primer	T C G A A T G G	C C A T T C G A	T C T G T T G G
TransNGS® UDI 89 Primer	C T T A G T G T	A C A C T A A G	T A T C G C A C
TransNGS® UDI 90 Primer	T C C G A C A C	G T G T C G G A	C G C T A T G T



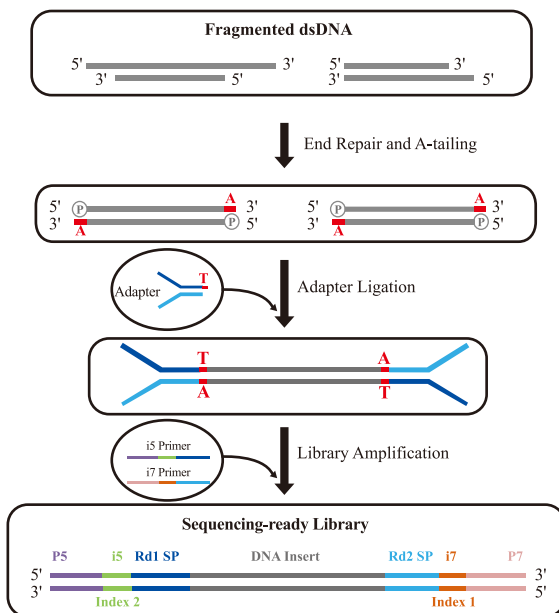
Primer Name	i5 Primers		i7 Primers
	Miseq, HiSeq 2000/2500, NovaSeq v1.0	MiniSeq, NextSeq, HiSeq 3000/4000, NovaSeq v1.5	All Illumina Systems
TransNGS® UDI 91 Primer	AACAGGAA	TTCTGTGT	GTATGTTT
TransNGS® UDI 92 Primer	GGTGAAGG	CCTTCACC	ACGCACCT
TransNGS® UDI 93 Primer	CCTGTGGC	GCCACAGG	TACTCATA
TransNGS® UDI 94 Primer	TTCACAAT	ATTGTGAA	CGTCTGCG
TransNGS® UDI 95 Primer	ACACGAGT	ACTCGTGT	TCGATATC
TransNGS® UDI 96 Primer	GTGTAGAC	GTCTACAC	CTAGCGCT

Index Pooling Guidelines

Illumina sequencers use a green laser to sequence bases G/ T and a red laser to sequence bases A/ C. To ensure the success of sequencing, color balance in each sequencing cycle is required. Therefore, it is necessary to make sure that both green-laser bases and red-laser bases are included in each sequencing cycle when pooling multiple indexes.

Appendix

Workflow demonstrating the use of this kit with TransNGS® DNA Library Prep Kit for Illumina®:



Workflow demonstrating the use of this kit with *TransNGS*[®] Fast RNA-Seq Library Prep Kit for Illumina[®]

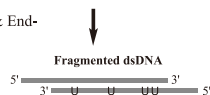
1. RNA fragmentation



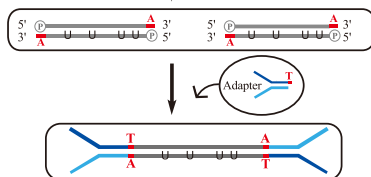
2. First-strand cDNA synthesis



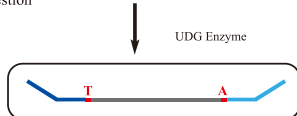
3. Second-strand cDNA synthesis & End-Repair and A-Tailing



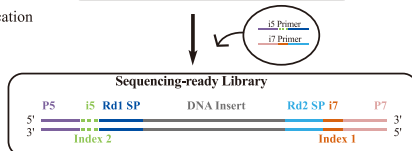
4. Adapter Ligation



5. Second-strand cDNA digestion



6. Library Amplification



If this kit is used with *TransNGS*[®] DNA Library Prep Kit for Illumina[®] or *TransNGS*[®] Fast RNA-Seq Library Prep Kit for Illumina[®], the resulting library has the following sequences:

5'-AATGATACGGCGACCACCGAGATCTACAC[i5]ACACTCTTTCCCTACACGACGCTCTTCCGATCT-XXXXXXXXX-AGATCGGAAGAGCACACGTCTGAACTCCAGTCAC[i7]ATCTCGTATGCCGTCTTCTGCTTG-3'

i5: Index 2, 8 bases;

i7: Index 1, 8 bases;

-XXXXXXXX-: inserted sequence.

For research use only, not for clinical diagnosis.

Version number: V2.0-202312

Service telephone +86-10-57815020

Service email complaints@transgen.com

