

TransNGS® Index Primers (384) Kit for Illumina®

Cat. No. KI241

Storage: at -20°C for two years

Description

TransNGS® Index Primers (384) Kit for Illumina® is suitable for multiplex library preparation for next-generation sequencing on the Illumina platform. This kit contains 16 different i5 primers (i509-i524) and 24 different i7 primers (i713-i736). 384 uniquely dual-indexed libraries can be prepared using this kit.

Application

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

Kit Contents

Component		KI241-01 (96 rxns)	KI241-02 (384 rxns)
i5 Primer	TransNGS® i509 Primer	15 µl	60 µl
	TransNGS® i510 Primer	15 µl	60 µl
	TransNGS® i511 Primer	15 µl	60 µl
	TransNGS® i512 Primer	15 µl	60 µl
	TransNGS® i513 Primer	15 µl	60 µl
	TransNGS® i514 Primer	15 µl	60 µl
	TransNGS® i515 Primer	15 µl	60 µl
	TransNGS® i516 Primer	15 µl	60 µl
	TransNGS® i517 Primer	15 µl	60 µl
	TransNGS® i518 Primer	15 µl	60 µl
	TransNGS® i519 Primer	15 µl	60 µl
	TransNGS® i520 Primer	15 µl	60 µl
	TransNGS® i521 Primer	15 µl	60 µl
	TransNGS® i522 Primer	15 µl	60 µl
	TransNGS® i523 Primer	15 µl	60 µl
	TransNGS® i524 Primer	15 µl	60 µl
i7 Primer	TransNGS® i713 Primer	10 µl	40 µl
	TransNGS® i714 Primer	10 µl	40 µl
	TransNGS® i715 Primer	10 µl	40 µl
	TransNGS® i716 Primer	10 µl	40 µl
	TransNGS® i717 Primer	10 µl	40 µl
	TransNGS® i718 Primer	10 µl	40 µl
	TransNGS® i719 Primer	10 µl	40 µl
	TransNGS® i720 Primer	10 µl	40 µl
	TransNGS® i721 Primer	10 µl	40 µl
	TransNGS® i722 Primer	10 µl	40 µl
	TransNGS® i723 Primer	10 µl	40 µl
	TransNGS® i724 Primer	10 µl	40 µl
	TransNGS® i725 Primer	10 µl	40 µl
	TransNGS® i726 Primer	10 µl	40 µl
	TransNGS® i727 Primer	10 µl	40 µl
	TransNGS® i728 Primer	10 µl	40 µl
	TransNGS® i729 Primer	10 µl	40 µl
	TransNGS® i730 Primer	10 µl	40 µl
	TransNGS® i731 Primer	10 µl	40 µl
	TransNGS® i732 Primer	10 µl	40 µl
	TransNGS® i733 Primer	10 µl	40 µl
	TransNGS® i734 Primer	10 µl	40 µl
	TransNGS® i735 Primer	10 µl	40 µl
	TransNGS® i736 Primer	10 µl	40 µl

Sequence Information

TransNGS® i509-i524 Primer:

5'-AATGATACGGCGACCACCGAGATCTACAC[i5]ACACTCTTTCCCTACACGACGCTCTTCCGATC-s-T-3'

TransNGS® i713-i736 Primer:

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

i5: Index 2, 8 bases;

i7: Index 1, 8 bases;

-s- indicates a phosphorothioate bond

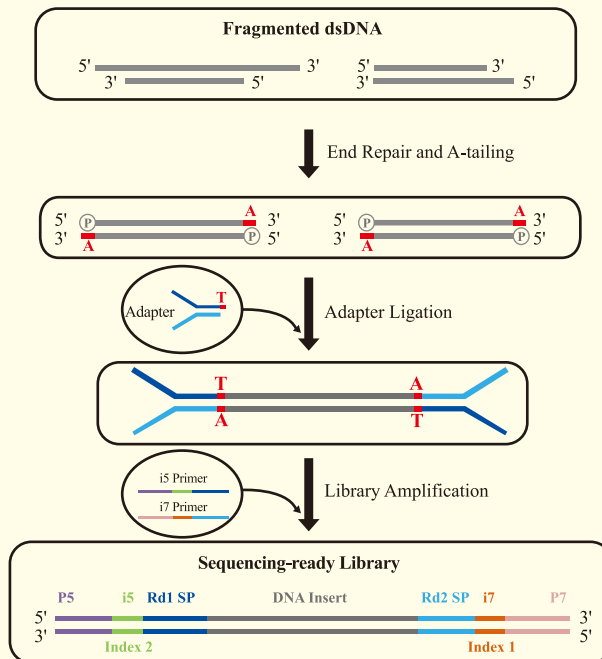
Component		i5 Bases in Index Primer	Index Sequence Read	
			MiSeq, HiSeq 2000/2500	MiniSeq, NextSeq, HiSeq 3000/4000
i5 Primer	TransNGS® i509 Primer	T A T A G C C T	T A T A G C C T	A G G C T A T A
	TransNGS® i510 Primer	A T A G A G G C	A T A G A G G C	G C C T C T A T
	TransNGS® i511 Primer	C C T A T C C T	C C T A T C C T	A G G A T A G G
	TransNGS® i512 Primer	G G C T C T G A	G G C T C T G A	T C A G A G C C
	TransNGS® i513 Primer	A G G C G A A G	A G G C G A A G	C T T C G C C T
	TransNGS® i514 Primer	T A A T C T T A	T A A T C T T A	T A A G A T T A
	TransNGS® i515 Primer	C A G G A C G T	C A G G A C G T	A C G T C C T G
	TransNGS® i516 Primer	G T A C T G A C	G T A C T G A C	G T C A G T A C
	TransNGS® i517 Primer	G A C C T G T A	G A C C T G T A	T A C A G G T C
	TransNGS® i518 Primer	A T G T A A C T	A T G T A A C T	A G T T A C A T
	TransNGS® i519 Primer	G T T T C A G A	G T T T C A G A	T C T G A A A C
	TransNGS® i520 Primer	C A C A G G A T	C A C A G G A T	A T C C T G T G
	TransNGS® i521 Primer	T A G C T G C C	T A G C T G C C	G G C A G C T A
	TransNGS® i522 Primer	A G C G A A T G	A G C G A A T G	C A T T C G C T
TransNGS® i523 Primer	T A T G C T G C	T A T G C T G C	G C A G C A T A	
TransNGS® i524 Primer	A G A A G A C T	A G A A G A C T	A G T C T T C T	
Component		i7 Bases in Index Primer	Index Sequence Read	
i7 Primer	TransNGS® i713 Primer	C G A G T A A T	A T T A C T C G	
	TransNGS® i714 Primer	T C T C C G G A	T C C G G A G A	
	TransNGS® i715 Primer	A A T G A G C G	C G C T C A T T	
	TransNGS® i716 Primer	G G A A T C T C	G A A G A T T C C	
	TransNGS® i717 Primer	T T C T G A A T	A T T C A G A A	
	TransNGS® i718 Primer	A C G A A T T C	G A A T T C G T	
	TransNGS® i719 Primer	A G C T T C A G	C T G A A G C T	
	TransNGS® i720 Primer	G C G C A T T A	T A A T G C G C	
	TransNGS® i721 Primer	C A T A G C C G	C G G C T A T G	
	TransNGS® i722 Primer	T T C G C G G A	T C C G C G A A	
	TransNGS® i723 Primer	G C G C G A G A	T C T C G C G C	
	TransNGS® i724 Primer	C T A T C G C T	A G C G A T A G	
	TransNGS® i725 Primer	C C T A C A C G	C G T G T A G G	
	TransNGS® i726 Primer	G T A G T G T C	G A C A C T A C	
	TransNGS® i727 Primer	T G T A T G C A	T G C A T A C A	
	TransNGS® i728 Primer	C C A G A C T G	C A G T C T G G	
	TransNGS® i729 Primer	A G G T G C C A	T G G C A C C T	
	TransNGS® i730 Primer	T C A C C T T G	C A A G G T G A	
	TransNGS® i731 Primer	G T A T C T T T	A A A G A T A C	
	TransNGS® i732 Primer	C A G C T C C A	T G G A G C T G	
TransNGS® i733 Primer	T C G C C T T A	T A A G G C G A		
TransNGS® i734 Primer	C T A G T A C G	C G T A C T A G		
TransNGS® i735 Primer	A G C G T A G C	G C T A C G C T		
TransNGS® i736 Primer	G A G C C T C G	C G A G G C T C		

Index Pooling Guidelines

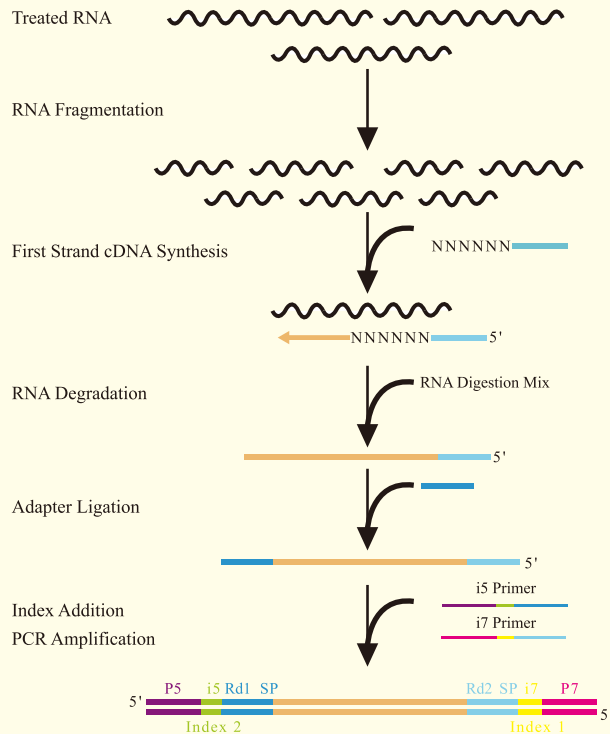
Illumina sequencers use a green laser to sequence bases G/ T and a red laser to sequence bases A/ C. To ensure the success of sequencing, color balance in each sequencing cycle is required. Therefore, it is necessary to make sure that both green-laser bases and red-laser bases are included in each sequencing 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*[®] Stranded RNA-Seq Library Prep Kit for Illumina[®]:



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

5'-AATGATACGGCGACCACCGAGATCTACAC[i5]ACACTCTTCCCTACACGACGCTCTCCGATCT-XXXXXXX-
AGATCGGAAGAGCACACGTCTGAACTCCAGTCAC[i7]ATCTCGTATGCCGTCTTCTGCTTG-3'

i5: Index 2, 8 bases;

i7: Index 1, 8 bases;

-XXXXXXX-: inserted DNA

FOR RESEARCH USE ONLY