

TruePrep Index Kit V3 for Illumina



TD203

Version 23.1

Product Description

TruePrep Index Kit V3 for Illumina is specially designed for TruePrep DNA Library Prep Kit V2 for Illumina (Vazyme #TD501-TD503), UltraClean DNA Library Prep Kit V2 for Illumina (Vazyme #UTD501/UTD502/UTD503) and TruePrep Flexible DNA Library Prep Kit for Illumina (Vazyme #TD504). It contains 16 kinds of N6XX and 24 kinds of N8XX, providing 384 kinds of different dual-indexed adapter combinations. All the reagents provided in the kit have undergone rigorous quality control and functional testing to ensure the optimal stability and repeatability of library preparation.

Components

Components	Specifications (768 rxns)	Index Sequence	Sample Sheet		Index Name	
			NovaSeq 1.0, MiSeq, HiSeq 2000/2500	NovaSeq 1.5, MiniSeq, NextSeq, HiSeq 3000/4000, HiSeq X		
N6XX	N601	240 µl	CTCTCTAT	CTCTCTAT	ATAGAGAG	■
	N602	240 µl	TATCCTCT	TATCCTCT	AGAGGATA	■
	N603	240 µl	GTAAGGAG	GTAAGGAG	CTCCTTAC	■
	N604	240 µl	ACTGCATA	ACTGCATA	TATGCAGT	■
	N605	240 µl	AAGGAGTA	AAGGAGTA	TACTCCTT	■
	N606	240 µl	CTAAGCCT	CTAAGCCT	AGGCTTAG	■
	N608	240 µl	TCTCTCCG	TCTCTCCG	CGGAGAGA	■
	N609	240 µl	TCGACTAG	TCGACTAG	CTAGTCGA	■
	N610	240 µl	TTCTAGCT	TTCTAGCT	AGCTAGAA	■
	N613	240 µl	CTATTAAG	CTATTAAG	CTTAATAG	■
	N614	240 µl	AAGGCTAT	AAGGCTAT	ATAGCCTT	■
	N615	240 µl	GAGCCTTA	GAGCCTTA	TAAGGCTC	■
	N616	240 µl	TTATGCGA	TTATGCGA	TCGCATAA	■
	N617	240 µl	TATGAGTA	TATGAGTA	TACTCATA	■
	N618	240 µl	GATATCGA	GATATCGA	TCGATATC	■
	N619	240 µl	ACATAGCG	ACATAGCG	CGCTATGT	■
N8XX	N801	160 µl	TAAGGCGA	TAAGGCGA	TAAGGCGA	■
	N802	160 µl	CGTACTAG	CGTACTAG	CGTACTAG	■
	N807	160 µl	CTCTCTAC	CTCTCTAC	CTCTCTAC	■
	N808	160 µl	CGAGGCTG	CGAGGCTG	CGAGGCTG	■
	N810	160 µl	GTAGAGGA	GTAGAGGA	GTAGAGGA	■
	N812	160 µl	ATCTCAGG	ATCTCAGG	ATCTCAGG	■
	N813	160 µl	ACTCGCTA	ACTCGCTA	ACTCGCTA	■
	N814	160 µl	GGAGCTAC	GGAGCTAC	GGAGCTAC	■
	N816	160 µl	CGGAGCCT	CGGAGCCT	CGGAGCCT	■
	N818	160 µl	ATGCGCAG	ATGCGCAG	ATGCGCAG	■
	N819	160 µl	TAGCGCTC	TAGCGCTC	TAGCGCTC	■
	N820	160 µl	ACTGAGCG	ACTGAGCG	ACTGAGCG	■
	N821	160 µl	CCTAAGAC	CCTAAGAC	CCTAAGAC	■
	N822	160 µl	CGATCAGT	CGATCAGT	CGATCAGT	■
	N823	160 µl	TGCAGCTA	TGCAGCTA	TGCAGCTA	■
	N825	160 µl	GTGAATAT	GTGAATAT	GTGAATAT	■
	N826	160 µl	ACAGGCGC	ACAGGCGC	ACAGGCGC	■
	N827	160 µl	CATAGAGT	CATAGAGT	CATAGAGT	■
	N828	160 µl	TGCGAGAC	TGCGAGAC	TGCGAGAC	■
	N829	160 µl	TCTCTACT	TCTCTACT	TCTCTACT	■
	N830	160 µl	CTCTCGTC	CTCTCGTC	CTCTCGTC	■
	N831	160 µl	CCAAGTCT	CCAAGTCT	CCAAGTCT	■
	N832	160 µl	TTGGACTC	TTGGACTC	TTGGACTC	■
	N833	160 µl	GCAGAATT	GCAGAATT	GCAGAATT	■

▲ N6XX and N8XX were respectively used in 5 µl volumes in individual DNA libraries.

▲ Colors noted in the product components table represent the separate cover colors in each group.



Storage

Store at -30 ~ -15°C and transport at ≤0°C.

Application

Special for TruePrep DNA Library Prep Kit V2 for Illumina (Vazyme #TD501-TD503), UltraClean DNA Library Prep Kit V2 for Illumina (Vazyme #UTD501/UTD502/UTD503) and TruePrep Flexible DNA Library Prep Kit for Illumina (Vazyme #TD504).

Notes

For research use only. Not for use in diagnostic procedures.

1. The N6XX index sequences of NovaSeq 1.5, MiniSeq, NextSeq, HiSeq 3000/4000, and HiSeq X sequencing platforms need to be input in the sample sheet after reverse complementation.
2. Pay attention to prevent crosstalk between different indexes.

Library Structure and Sequences

The structure of DNA library constructed by TruePrep Index Kit V3 for Illumina is as follows:

5' - **Index 2 (i5)** - Insert DNA Sequence - **Index 1 (i7)** - 3'

The kit contains 16 kinds of N6XX and 24 kinds of N8XX, which can be combined into 384 different double ended index combinations for distinguishing different samples during high-throughput sequencing.

Strategy of Index Selection

Green fluorescent labeled dG/dT and red fluorescent labeled dC/dA were used in Illumina. To ensure successful sequencing, both green and red fluorescent signal must be detected in each sequencing cycle. Therefore, it is important to keep balance of the green and red fluorescence signals when choosing the Indices. The selection principles are shown in the following table.

Examples of Right Selection				Examples of Wrong Selection			
Number of	N8XX			Number of	N8XX		
Samples	Sample ID	[Index 1 (i7)]	[Index 2 (i5)]	Samples	Sample ID	[Index 1 (i7)]	[Index 2 (i5)]
4	1 N827	C A T A G A G T	N603 G T A A G G A G	4	1 N827	C A T A G A G T	N602 T A T C C T C T
	2 N828	T G C G A G A C	N603 G T A A G G A G		2 N828	T G C G A G A C	N602 T A T C C T C T
	3 N801	T A A G G C G A	N604 A C T G C A T A		3 N801	T A A G G C G A	N603 G T A A G G A G
	4 N802	C G T A C T A G	N604 A C T G C A T A		4 N802	C G T A C T A G	N603 G T A A G G A G
		√ √ √ √ √ √ √	√ √ √ √ √ √ √			√ √ √ √ √ √ √	× √ √ × √ × × ×

▲ √: Have both green and red fluorescence signals.

×: Missing green or red fluorescence signals.

