

UDI UMI Adapters Primers for Illumina

Instruction for Use

【Product Name】

UDI UMI Adapters Primers for Illumina

【Cat. No. & Spec.】

K003-A, K003-B, K003-C, K003-D; 96 rxns each

【Product Description】

#K003 UDI UMI Adapter has a 6 nt random complementary sequence, allowing for the addition of 6 nt UMI (Unique Molecular Identifiers) at both ends of the library after adapters ligation. The UMI allows multiplex analysis for multiple samples simultaneously, reducing the detection rate of false positive variants and improving the sensitivity of detection for low frequency mutations. Each pre-mixed 96 UDI Primer contains a unique pair of one 8nt i5 index and one 8nt i7 index primer, which can be independently double-checked by library amplification to meet the high-throughput sequencing mixing requirements and greatly reduce the sample index misassignment.

【Storage Condition & Shelf Life】

All reagents should be stored at -20°C. The product is valid for 12 months.

Do not premix Adapter, Ligation Buffer and DNA Ligase before use to avoid formation of excessive Adapter dimer.

【Scope of application】

This product is a special adapter primer kit for # K001 Fast DNA Library Prep Kit, which is applicable for Illumina platform.

【Components】

Component	K003-A (96rxns)	K003-B (96rxns)	K003-C (96rxns)	K003-D (96rxns)
UDI Adapter	480µl	480µl	480µl	480µl
UDI Primer (UDI 001 - UDI 024)	20µl/each			
UDI Primer (UDI 025 - UDI 048)	20µl/each			
UDI Primer (UDI 049 - UDI 072)	20µl/each			
UDI Primer (UDI 073 - UDI 096)	20µl/each			

Sequence Information

UDI Adapter:

5'-ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNN-s-T-3'

5'-p-NNNNNNAGATCGGAAGAGCACACGTCTGAACTCCAGTC-3'

N indicates that each Adapter has a 6 nt random complementary UMI sequence, -s- indicates a phosphorothioate modification, and -p- indicates a phosphorylation modification.

UDI i5 PCR Primer:

5'-AATGATACGGCGACCACCGAGATCTACAC[i5]ACACTCTTTCCCTACACGACGCT C-3'

UDI i7 PCR Primer:

5'-CAAGCAGAAGACGGCATAACGAGAT[i7]GTGACTGGAGTTCAGACGTGTGCTCT-3'

[i5] refers to the 8 nt i5 index sequence and [i7] refers to the 8 nt i7 index sequence.

The i7 index in the table below is the index sequence in the primers, and the index sequence is reverse complementary when input/sequencing in the sample sheet.

K003-A

UDI Primer	i5 index		i7 index
	MiSeq, HiSeq 2000/2500, NovaSeq Input Sequences	HiSeq, MiniSeq, NextSeq, HiSeq 3000,4000, HiSeq X Input Sequences	
	UDI 001	ATATGCGC	
UDI 002	TGGTACAG	CTGTACCA	ACTCTCGA
UDI 003	AACCGTTC	GAACGGTT	TGAGCTAG
UDI 004	TAACCGGT	ACCGGTTA	GAGACGAT
UDI 005	GAACATCG	CGATGTTC	CTTGTCGA
UDI 006	CCTTGTAG	CTACAAGG	TTCCAAGG
UDI 007	TCAGGCTT	AAGCCTGA	CGCATGAT
UDI 008	GTTCTCGT	ACGAGAAC	ACGGAACA
UDI 009	AGAACGAG	CTCGTTCT	CGGCTAAT
UDI 010	TGCTTCCA	TGGAAGCA	ATCGATCG
UDI 011	CTTCGACT	AGTCGAAG	GCAAGATC
UDI 012	CACCTGTT	AACAGGTG	GCTATCCT
UDI 013	ATCACACG	CGTGTGAT	TACGCTAC
UDI 014	CCGTAAGA	TCTTACGG	TGGACTCT
UDI 015	TACGCCTT	AAGGCGTA	AGAGTAGC
UDI 016	CGACGTTA	TAACGTCG	ATCCAGAG
UDI 017	ATGCACGA	TCGTGCAT	GACGATCT
UDI 018	CCTGATTG	CAATCAGG	AACTGAGC
UDI 019	GTAGGAGT	ACTCCTAC	CTTAGGAC
UDI 020	ACTAGGAG	CTCCTAGT	GTGCCATA
UDI 021	CACTAGCT	AGCTAGTG	GAATCCGA
UDI 022	ACGACTTG	CAAGTCGT	TCGCTGTT
UDI 023	CGTGTGTA	TACACACG	TTCGTTGG
UDI 024	GTTGACCT	AGGTCAAC	AAGCACTG

K003-B

UDI Primer	i5 index		i7 index
	MiSeq, HiSeq 2000/2500, NovaSeq Input Sequences	HiSeq, MiniSeq, NextSeq, HiSeq 3000,4000, HiSeq X Input Sequences	
	UDI 025	ACTCCATC	
UDI 026	CAATGTGG	CCACATTG	GTCGAAGA
UDI 027	TTGCAGAC	GTCTGCAA	ACCACGAT
UDI 028	CAGTCCAA	TTGGACTG	GATTACCG
UDI 029	ACGTTTCA	CTGAACGT	GCACAAC
UDI 030	AACGTCTG	CAGACGTT	GCGTCATT
UDI 031	TATCGGTC	GACCGATA	ATCCGGTA
UDI 032	CGCTCTAT	ATAGAGCG	CGTTGCAA
UDI 033	GATTGCTC	GAGCAATC	GTGAAGTG
UDI 034	GATGTGTG	CACACATC	CATGGCTA
UDI 035	CGCAATCT	AGATTGCG	ATGCCTGT
UDI 036	TGGTAGCT	AGCTACCA	CAACACCT
UDI 037	GATAGGCT	AGCCTATC	TGTGACTG
UDI 038	AGTGGATC	GATCCACT	GTCATCGA
UDI 039	TTGGACGT	ACGTCCAA	AGCACTTC
UDI 040	ATGACGTC	GACGTCAT	GAAGGAAG
UDI 041	GAAGTTGG	CCAACCTC	GTTGTTCC
UDI 042	CATACCAC	GTGGTATG	CGGTTGTT
UDI 043	CTGTTGAC	GTCAACAG	ACTGAGGT
UDI 044	TGGCATGT	ACATGCCA	TGAAGACG
UDI 045	ATCGCCAT	ATGGCGAT	GTTACGCA
UDI 046	TTGCGAAG	CTTCGCAA	AGCGTGTT
UDI 047	AGTTCGTC	GACGAAC	GATCGAGT
UDI 048	GAGCAGTA	TACTGCTC	ACAGCTCA

K003-C

UDI Primer	i5 index		i7 index
	MiSeq, HiSeq 2000/2500, NovaSeq Input Sequences	HiSeq, MiniSeq, NextSeq, HiSeq 3000,4000, HiSeq X Input Sequences	
	UDI 049	ACAGCTCA	
UDI 050	GATCGAGT	ACTCGATC	AGTTGTC
UDI 051	AGCGTGTT	AACACGCT	TTGCGAAG
UDI 052	GTTACGCA	TGCGTAAC	ATCGCCAT
UDI 053	TGAAGACG	CGTCTTCA	TGGCATGT
UDI 054	ACTGAGGT	ACCTCAGT	CTGTTGAC
UDI 055	CGGTTGTT	AACAACCG	CATACCAC
UDI 056	GTTGTTTCG	CGAACAAC	GAAGTTGG
UDI 057	GAAGGAAG	CTTCCTTC	ATGACGTC
UDI 058	AGCACTTC	GAAGTGCT	TTGGACGT
UDI 059	GTCATCGA	TCGATGAC	AGTGGATC
UDI 060	TGTGACTG	CAGTCACA	GATAGGCT
UDI 061	CAACACCT	AGGTGTTG	TGGTAGCT
UDI 062	ATGCCTGT	ACAGGCAT	CGCAATCT
UDI 063	CATGGCTA	TAGCCATG	GATGTGTG
UDI 064	GTGAAGTG	CACTTCAC	GATTGCTC
UDI 065	CGTTGCAA	TTGCAACG	CGCTCTAT
UDI 066	ATCCGGTA	TACCGGAT	TATCGGTC
UDI 067	GCGTCATT	AATGACGC	AACGTCTG
UDI 068	GCACAACCT	AGTTGTGC	ACGTTCCAG
UDI 069	GATTACCG	CGGTAATC	CAGTCCAA
UDI 070	ACCACGAT	ATCGTGGT	TTGCAGAC
UDI 071	GTCGAAGA	TCTTCGAC	CAATGTGG
UDI 072	CCTTGATC	GATCAAGG	ACTCCATC

K003-D

UDI Primer	i5 index		i7 index
	MiSeq, HiSeq 2000/2500, NovaSeq Input Sequences	HiSeq, MiniSeq, NextSeq, HiSeq 3000,4000, HiSeq X Input Sequences	
	UDI 073	AAGCACTG	
UDI 074	TTCGTTGG	CCAACGAA	CGTGTGTA
UDI 075	TCGCTGTT	AACAGCGA	ACGACTTG
UDI 076	GAATCCGA	TCGGATTC	CACTAGCT
UDI 077	GTGCCATA	TATGGCAC	ACTAGGAG
UDI 078	CTTAGGAC	GTCCTAAG	GTAGGAGT
UDI 079	AACTGAGC	GCTCAGTT	CCTGATTG
UDI 080	GACGATCT	AGATCGTC	ATGCACGA
UDI 081	ATCCAGAG	CTCTGGAT	CGACGTTA
UDI 082	AGAGTAGC	GCTACTCT	TACGCCTT
UDI 083	TGGACTCT	AGAGTCCA	CCGTAAGA
UDI 084	TACGCTAC	GTAGCGTA	ATCACACG
UDI 085	GCTATCCT	AGGATAGC	CACCTGTT
UDI 086	GCAAGATC	GATCTTGC	CTTCGACT
UDI 087	ATCGATCG	CGATCGAT	TGCTTCCA
UDI 088	CGGCTAAT	ATTAGCCG	AGAACGAG
UDI 089	ACGGAACA	TGTTCCGT	GTTCTCGT
UDI 090	CGCATGAT	ATCATGCG	TCAGGCTT
UDI 091	TTCCAAGG	CCTTGGA	CCTTGTAG
UDI 092	CTTGTCGA	TCGACAAG	GAACATCG
UDI 093	GAGACGAT	ATCGTCTC	TAACCGGT
UDI 094	TGAGCTAG	CTAGCTCA	AACCGTTC
UDI 095	ACTCTCGA	TCGAGAGT	TGGTACAG
UDI 096	CTGATCGT	ACGATCAG	ATATGCGC