ALITHEA GENOMICS

Unique Dual Indexing 10 bp-Adapter Sequences for Illumina

Name	Type	i7 index sequence	i5 index sequence Forward Workflow	i5 index sequence Reverse Workflow
MF.V5.UDI.10	UDI (i7/i5)	GAGAATGGTT	TCGGCAGCAA	TTGCTGCCGA
MF.V5.UDI.11	UDI (i7/i5)	CCATCATTAG	GGTTGCCTCT	AGAGGCAACC
MF.V5.UDI.12	UDI (i7/i5)	GATAGGCCGA	CGCACATGGC	GCCATGTGCG
MF.V5.UDI.13	UDI (i7/i5)	ATGGTTGACT	GGCCTGTCCT	AGGACAGGCC
MF.V5.UDI.14	UDI (i7/i5)	ACGCCTTGTT	TAAGGAACGT	ACGTTCCTTA
MF.V5.UDI.15	UDI (i7/i5)	TTCTACATAC	CTAACTGTAA	TTACAGTTAG
MF.V5.UDI.16	UDI (i7/i5)	GGTTGCGAGG	AATAGAGCAA	TTGCTCTATT
MF.V5.UDI.17	UDI (i7/i5)	TAAGCATCCA	TCAATCCATT	AATGGATTGA
MF.V5.UDI.18	UDI (i7/i5)	ACCACGACAT	TCGTATGCGG	CCGCATACGA
MF.V5.UDI.19	UDI (i7/i5)	AACACTGTTA	GCAAGTCTCA	TGAGACTTGC
MF.V5.UDI.20	UDI (i7/i5)	ATTGCGCGGT	TTGGCTCCGC	GCGGAGCCAA
MF.V5.UDI.21	UDI (i7/i5)	TGGCGCGAAC	AACTGATACT	AGTATCAGTT

The unique Dual Indexing (UDI) strategy ensures the highest accuracy in library sequencing and demultiplexing, adhering to best practices for Illumina sequencing platforms. UD-indexed libraries feature distinct index adapters for both i7 and i5 index reads.

The new version of the extended module includes 10 bp index sequences, which can be sequenced as 8 bp indexes on the instruments listed below. Illumina instruments support two workflows for sequencing the i5 index (see the details in the Indexed Sequencing Overview Guide on Illumina's website for details).

Forward-strand workflow instruments:

- NovaSeq 6000 with v1.0 reagents
- MiSeq with Rapid reagents
- HiSeq 2500, HiSeq 2000

Reverse-strand workflow instruments:

- NovaSeq 6000 with v1.5 reagents
- iSeq 100
- MiniSeq with Standard reagents
- NextSeq
- HiSeq X, HiSeq 4000, HiSeq 3000

The current indexes are **Illumina X-Leap-SBS-compatible** and can be used in Novaseq X, Novaseq X Plus, and NextSeq1000/2000 instruments.