

FOR REFERENCE PURPOSES

This manual is for Reference Purposes Only. DO NOT use this protocol to run your assays. Periodically, optimizations and revisions are made to the kit and protocol, so it is important to always use the protocol included with the kit.

NEXTflex-HT™ Barcodes - 6

(Illumina Compatible)

Catalog #514170 (48 reactions)



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NEXTflex-HT™ Barcodes - 6 - 514170

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Product Overview

The NEXTflex-HT™ Barcodes are designed to prepare multiplexed, single or paired-end libraries for sequencing using Illumina® platforms. The index and flow cell binding sequence are contained within the NEXTflex-HT™ Barcodes and are attached onto sample inserts during adapter ligation. NEXTflex-HT™ Barcodes allow for at least two error corrections and have multiple low-diversity pooling options.

Contents, Storage and Shelf Life

The NEXTflex-HT™ Barcodes contain six barcoded adapters with enough material for eight standard DNA-Seq reactions each, for a total of 48 reactions. The shelf life of each reagent is 12 months when stored at -20°C.

Kit Contents	Amount
NEXTflex-HT™ Barcode 1 - 6* (25 µM)	20 µL
NEXTflex™ Primer Mix (12.5 µM)	96 µL

*The NEXTflex-HT™ Barcodes are supplied in duplex form. Do not heat the adapter above room temperature.

Warnings and Precautions

Bioo Scientific strongly recommends that you read the following warnings and precautions. Periodically, optimizations and revisions are made to the components and manual. Therefore, it is important to follow the protocol included with the kit. If you need further assistance, you may contact your local distributor, or contact Bioo Scientific at NextGen@BiooScientific.com.

- Do not use the kit past the expiration date.
- Ensure pipettes are properly calibrated as library preparations are highly sensitive to pipetting error.
- Do not heat the NEXTflex-HT™ Barcodes above room temperature.
- Try to maintain a laboratory temperature of 20°–25°C (68°–77°F).
- The NEXTflex™ Primer Mix must be used during PCR amplification. Inadvertent use of an incorrect primer sequence can potentially result in elimination of the index.

Oligonucleotide Sequences

NEXTflex™	Sequence (5' → 3')
PCR Primer 1	AATGATACGGCGACCACCGAGATCTACAC
PCR Primer 2	CAAGCAGAAGACGGCATAACGAGAT
NEXTflex-HT™ Barcode	AATGATACGGCGACCACCGAGATCTACACTCTTTCCCTACAGGAGCTCTTCCGATCT GATCGGAAGAGCACACGTCTGAACTCCAGTCACXXXXXXXXXXATCTCGTATGCCGTCTTCTGCTTG

'XXXXXXXXXXXX' denotes the index region of adapter. The index sequences contained in each adapter are listed below.

NEXTflex-HT™ Barcode Index		NEXTflex-HT™ Barcode Index	
Barcode 1	ATCTAGCCGGCC	Barcode 25	CTCCGATCGTCC
Barcode 2	TATCTCTCCTT	Barcode 26	TATTCGATCCGG
Barcode 3	TAGATGCCGTCC	Barcode 27	TCTTAATCGTCC
Barcode 4	CGCTCCTCCTT	Barcode 28	CGCCTGATCCGG
Barcode 5	CGAGCGCCGTCC	Barcode 29	AGAATATCGTCC
Barcode 6	TCGAGAGTCCGG	Barcode 30	GCGGAGATCCGG
Barcode 7	GCTCGGCCGGCC	Barcode 31	CATGGCCGGTCC
Barcode 8	AGCTCAGTCCGG	Barcode 32	GTCACGTACCTT
Barcode 9	ACTGCCGCGTCC	Barcode 33	TGCAACCGGTCC
Barcode 10	TTACTTCTCCGG	Barcode 34	CCTGTTGACCGG
Barcode 11	TGACGCGGGCC	Barcode 35	AGCCCAAGGTCC
Barcode 12	AATGATCTCCGG	Barcode 36	GCTTGGTACCGG
Barcode 13	AAGCGTACGTCC	Barcode 37	TCGGAAGGTCC
Barcode 14	TTATCAGTCCTT	Barcode 38	CGAACGTACCGG
Barcode 15	GTCATCGGTCC	Barcode 39	GATTTAAGGGCC
Barcode 16	CCGTCTCCTCCGG	Barcode 40	AGAAGTACCTT
Barcode 17	TTCGCTACGTCC	Barcode 41	CCGCCTTGGTCC
Barcode 18	ACGCTCTCCTCCGG	Barcode 42	TGATGCAACCGG
Barcode 19	CAGTACGGGCC	Barcode 43	GCGGTTGGGCC
Barcode 20	GTAATGATCCTT	Barcode 44	ACTACCAACCGG
Barcode 21	GGATATACGGCC	Barcode 45	AATAATTGGTCC
Barcode 22	CATAGCTTCCGG	Barcode 46	GTCGTCACCGG
Barcode 23	GAGGCATCGGCC	Barcode 47	AAATCTCAGGCC
Barcode 24	ATAAGGATCCGG	Barcode 48	GTGCGCGCCGG

Low Level Multiplexing

Every combination of sequential odd and even numbered barcodes is fully color balanced at all positions of the index. For example, barcodes 5 and 6 offer opposite colors at every position, but barcodes 6 and 7 do not. Larger pools can be made by combining multiple sets of color balanced pairs. For pools of odd numbers of samples, any barcode can be added to a balanced pool. For example, for a pool of 3 samples, pooling barcodes 5, 6, and any other barcode is acceptable.

For an electronic list of the indices contact: NextGen@BiooScientific.com.

ILLUMINA COMPATIBLE RNA NGS KITS AND ADAPTERS

Catalog #	Product
5138-01	NEXTflex™ Rapid RNA-Seq Kit (8 reactions)
5138-02	NEXTflex™ Rapid RNA-Seq Kit (48 reactions)
5138-07	NEXTflex™ Rapid Directional RNA-Seq Kit (8 reactions)
5138-08	NEXTflex™ Rapid Directional RNA-Seq Kit (48 reactions)
512911	NEXTflex™ RNA-Seq Barcodes –6
512912	NEXTflex™ RNA-Seq Barcodes – 12
512913	NEXTflex™ RNA-Seq Barcodes – 24
512914	NEXTflex™ RNA-Seq Barcodes – 48
512916	NEXTflex-96™ RNA-Seq Barcodes
5130-01	NEXTflex™ qRNA-Seq™ Kit 4 barcodes (8 reactions)
5130-02	NEXTflex™ qRNA-Seq™ Kit 24 barcodes - Set A (48 reactions)
5130-03	NEXTflex™ qRNA-Seq™ Kit 24 barcodes - Set B (48 reactions)
5130-04	NEXTflex™ qRNA-Seq™ Kit 24 barcodes - Set C (48 reactions)
5130-05	NEXTflex™ qRNA-Seq™ Kit 24 barcodes - Set D (48 reactions)
5130-01D	NEXTflex™ Rapid Directional qRNA-Seq™ Kit 4 barcodes (8 reactions)
5130-02D	NEXTflex™ Rapid Directional qRNA-Seq™ Kit 24 barcodes - Set A (48 reactions)
5130-03D	NEXTflex™ Rapid Directional qRNA-Seq™ Kit 24 barcodes - Set B (48 reactions)
5130-04D	NEXTflex™ Rapid Directional qRNA-Seq™ Kit 24 barcodes - Set C (48 reactions)
5130-05D	NEXTflex™ Rapid Directional qRNA-Seq™ Kit 24 barcodes - Set D (48 reactions)
5132-01	NEXTflex™ Small RNA Sequencing Kit (24 reactions)
5132-02	NEXTflex™ Small RNA Sequencing Kit (48 reactions)
5132-03	NEXTflex™ Small RNA Sequencing Kit v2 (24 reactions)
5132-04	NEXTflex™ Small RNA Sequencing Kit v2 (48 reactions)
513305	NEXTflex™ Small RNA Barcode Primers -12 (Set A)
513306	NEXTflex™ Small RNA Barcode Primers -12 (Set B)
513307	NEXTflex™ Small RNA Barcode Primers -12 (Set C)
513308	NEXTflex™ Small RNA Barcode Primers -12 (Set D)
512979	NEXTflex™ Poly(A) Beads (8 reactions)
512980	NEXTflex™ Poly(A) Beads (48 reactions)
512981	NEXTflex™ Poly(A) Beads (100 reactions)

Illumina Compatible DNA NGS Kits and Adapters

Catalog #	Product
4201-01	NEXTflex™ 16S V4 Amplicon-Seq Kit – 4
4201-02	NEXTflex™ 16S V4 Amplicon-Seq kit – 12
4201-03	NEXTflex™ 16S V4 Amplicon-Seq kit – 24
4201-04	NEXTflex™ 16S V4 Amplicon-Seq kit – 48
4201-05	NEXTflex™ 16S V4 Amplicon-Seq kit – 96
4201-06	NEXTflex™ 16S V4 Amplicon-Seq kit – 192
4201-07	NEXTflex™ 16S V4 Amplicon-Seq kit – 288
4202-01	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 4
4202-02	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 12
4202-03	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 48
4202-04	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 1-96
4202-05	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 97-192
4202-06	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 193-288
4202-07	NEXTflex™ 16S V1-V3 Amplicon-Seq Kit - 289-384
5140-01	NEXTflex™ DNA Sequencing Kit (8 reactions)
5140-02	NEXTflex™ DNA Sequencing Kit (48 reactions)
5144-01	NEXTflex™ Rapid DNA-Seq Kit (8 reactions)
5144-02	NEXTflex™ Rapid DNA-Seq Kit (48 reactions)
5150-01	NEXTflex™ Cell Free DNA-Seq Kit (8 reactions)
5150-02	NEXTflex™ Cell Free DNA-Seq Kit (48 reactions)
514101	NEXTflex-HT™ Barcodes – 6
514102	NEXTflex-HT™ Barcodes – 12
514103	NEXTflex-HT™ Barcodes – 24
514104	NEXTflex-HT™ Barcodes – 48
514105	NEXTflex-96™ DNA Barcodes (Plate Format)
514106	NEXTflex-96™ DNA Barcodes (Tube Format)
514160	NEXTflex™ Dual-Indexed DNA Barcodes (1-96)
514161	NEXTflex™ Dual-Indexed DNA Barcodes (97-192)
5119-01	NEXTflex™ Bisulfite-Seq kit (8 reactions)
5119-02	NEXTflex™ Bisulfite-Seq kit (48 reactions)
511911	NEXTflex™ Bisulfite-Seq Barcodes – 6
511912	NEXTflex™ Bisulfite-Seq Barcodes – 12
511913	NEXTflex™ Bisulfite-Seq Barcodes - 24
5118-01	NEXTflex™ Methyl-Seq 1 Kit (8 reactions)
5118-02	NEXTflex™ Methyl-Seq 1 Kit (48 reactions)

511921	NEXTflex™ Msp 1 (8 reactions)
511922	NEXTflex™ Msp 1 (48 reactions)

5143-01	NEXTflex™ ChIP-Seq Kit (8 reactions)
5143-02	NEXTflex™ ChIP-Seq Kit (48 reactions)
514120	NEXTflex™ ChIP-Seq Barcodes – 6
514121	NEXTflex™ ChIP-Seq Barcodes – 12
514122	NEXTflex™ ChIP-Seq Barcodes – 24
514123	NEXTflex™ ChIP-Seq Barcodes – 48
514124	NEXTflex-96™ ChIP-Seq Barcodes

5140-51	NEXTflex™ Pre-Capture Combo Kit (6 barcodes)
5140-52	NEXTflex™ Pre-Capture Combo Kit (12 barcodes)
5140-53	NEXTflex™ Pre-Capture Combo Kit (24 barcodes)
5140-56	NEXTflex™ Pre-Capture Combo Kit (48 barcodes)
5140-54	NEXTflex™ Pre-Capture Combo Kit (96 barcodes)
514131	NEXTflex™ DNA Barcode Blockers - 6 for SeqCap
514132	NEXTflex™ DNA Barcode Blockers - 12 for SeqCap
514133	NEXTflex™ DNA Barcode Blockers - 24 for SeqCap
514136	NEXTflex™ DNA Barcode Blockers - 48 for SeqCap
514134	NEXTflex™ DNA Barcode Blockers - 96 for SeqCap

5142-01	NEXTflex™ PCR-Free DNA Sequencing Kit (8 reactions)
5142-02	NEXTflex™ PCR-Free DNA Sequencing Kit (48 reactions)
514110	NEXTflex™ PCR-Free Barcodes – 6
514111	NEXTflex™ PCR-Free Barcodes – 12
514112	NEXTflex™ PCR-Free Barcodes – 24
514113	NEXTflex™ PCR-Free Barcodes – 48

DNA Fragmentation

Catalog #	Product
5135-01	AIR™ DNA Fragmentation Kit (10 reactions)
5135-02	AIR™ DNA Fragmentation Kit (40 reactions)



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