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# **NEXTflex-HT™ Barcodes - 6**

(For Illumina® Platforms)

Catalog #NOVA-514170 (Kit contains 48 reactions)



**This product is for research use only.  
Not for use in diagnostic procedures.**

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# NEXTflex-HT™ Barcodes - 6 - NOVA-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™ Barcodes 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](mailto: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	AATGATACGGGACCACCGAGATCTACAC
PCR Primer 2	CAAGCAGAAGACGGCATAACGAGAT
NEXTflex-HT™ Barcode	AATGATACGGGACCACCGAGATCTACACTCTTTCCCTACACGAGCGCTCTCCGATCT GATCGGAAGAGCACACGTCTGAACTCCAGTCAC <sup>XXXXXXXXXXXX</sup> ATCTCGTATGCCGTCTTCTGCTTG

<sup>1</sup>XXXXXXXXXXXX denotes the index region of adapter. The index sequences contained in each adapter are listed below.

NEXTflex-HT™ Barcode Index	
Barcode 1	ATCTAGCCGGCC
Barcode 2	TATCTCTCCTT
Barcode 3	TAGATGCCGTCC
Barcode 4	CGCTCCTCCTT
Barcode 5	CGAGCGCCGTCC
Barcode 6	TCGAGAGTCCGG
Barcode 7	GCTCGGCCGGCC
Barcode 8	AGCTCAGTCCGG
Barcode 9	ACTGCCGCGTCC
Barcode 10	TTACTTCTCCGG
Barcode 11	TGACGCGGGGCC
Barcode 12	AATGATCTCCGG
Barcode 13	AAGCGTACGTCC
Barcode 14	TTATCAGTCCTT
Barcode 15	GTCATCGCGTCC
Barcode 16	CCGTCTCCTCCGG
Barcode 17	TTCGCTACGTCC
Barcode 18	ACGCTCTCCTCCGG
Barcode 19	CAGTACGCGGCC
Barcode 20	GTAATGATCCTT
Barcode 21	GGATATACGGCC
Barcode 22	CATAGCTTCCGG
Barcode 23	GAGGCATCGGCC
Barcode 24	ATAAGGATCCGG

NEXTflex-HT™ Barcode Index	
Barcode 25	CTCCGATCGTCC
Barcode 26	TATTCGATCCGG
Barcode 27	TCTTAATCGTCC
Barcode 28	CGCCTGATCCGG
Barcode 29	AGAATATCGTCC
Barcode 30	GCGGAGATCCGG
Barcode 31	CATGGCCGGTCC
Barcode 32	GTCACGTACCTT
Barcode 33	TGCAACCGGTCC
Barcode 34	CCTGTTGACCGG
Barcode 35	AGCCCAAGGTCC
Barcode 36	GCTTGGTACCGG
Barcode 37	TCGGGAAGGTCC
Barcode 38	CGAACGTACCGG
Barcode 39	GATTTAAGGGCC
Barcode 40	AGAAGTACCTT
Barcode 41	CCGCCTTGGTCC
Barcode 42	TGATGCAACCGG
Barcode 43	GGCGTTGGGCC
Barcode 44	ACTACCAACCGG
Barcode 45	AATAATGGTCC
Barcode 46	GTCGTCACCGG
Barcode 47	AAATCTCAGGCC
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](mailto:NextGen@BiooScientific.com).

## NOTES



## **WE WANT TO HEAR FROM YOU!**

Your feedback is important to us. Tell us what you think of our kits by scanning the QR code or visiting our website at [www.biooscientific.com/NGSfeedback](http://www.biooscientific.com/NGSfeedback).

We can't wait to hear from you!



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Bio Scientific Corporation · 7050 Burleson Road, Austin, Texas 78744 · [BioScientific.com](http://BioScientific.com)  
P: 1.888.208.2246 · F: 512.707.8122 · Bio Research Products Group · [nextgen@bioscientific.com](mailto:nextgen@bioscientific.com)  
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