

## **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™ DNA Barcodes - 8**

**Ion Torrent™ Compatible  
Catalog #401001 (48 reactions)**



## **This product is for research use only.**

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# NEXTflex DNA Barcodes for Ion PGM & Ion Proton 8 - 401001

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## Product Overview

The NEXTflex™ DNA Barcodes for Ion Torrent™ are designed to prepare multiplexed genomic DNA libraries for sequencing using Ion Torrent™ sequencing platforms. Pooling with NEXTflex DNA Barcodes allows the user to multiplex several samples on a single Ion Torrent chip.

## Contents, Storage and Shelf Life

The NEXTflex™ DNA Barcodes for Ion Torrent™ contain 8 barcoded DNA Adapters with enough material for 6 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™ DNA P1 Adapter* (6.25 µM)	240 µL
NEXTflex™ DNA Barcode Adapters 1 - 8* (6.25 µM)	30 µL
NEXTflex™ Primer Mix (12.5 µM)	96 µL

\*The Barcode Adapters 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 Bioo Scientific at [nextgen@biooscientific.com](mailto:nextgen@biooscientific.com).

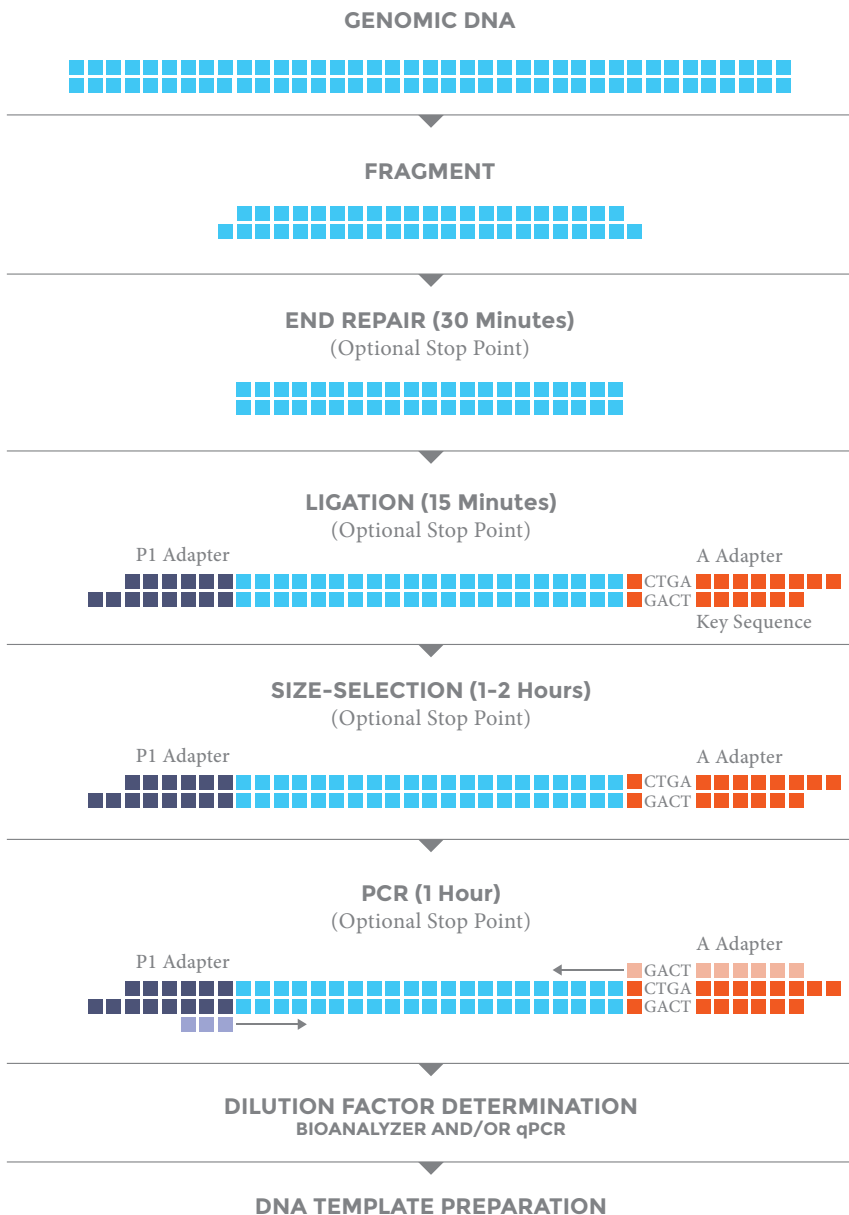
- Do not use the kit past the expiration date.
- Ensure pipettes are properly calibrated as library preparations are highly sensitive to pipetting error.
- Do not heat the DNA Adapters above room temperature.
- Try to maintain a laboratory temperature of 20°–25°C (68°–77°F).

## Revision History

Version	Date	Description of Change
V12.06	June 2012	Initial product launch.
V13.06	June 2013	Wording has been changed to include Ion PGM and Ion Proton. Agarose Gel Size Selection Step instructions have been clarified for 200 bp and 400 bp chemistry.
V 15.02	February 2015	Oligo sequences of Primers 1 and 2 in the Primer Mix have been optimized.

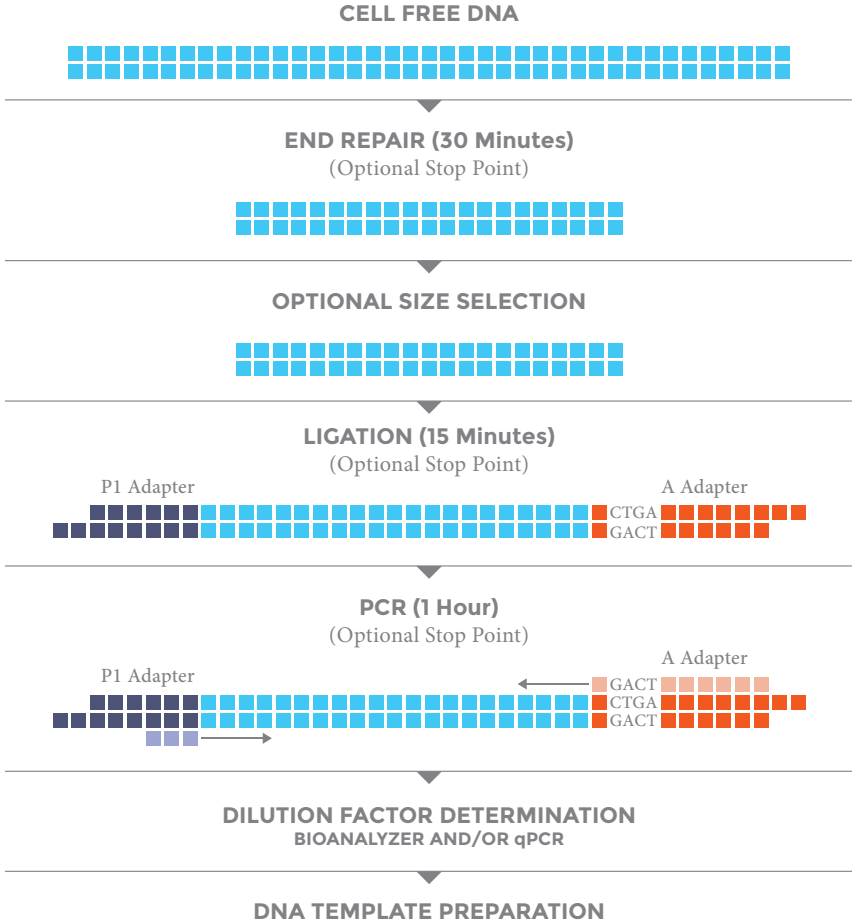
## NEXTflex™ DNA-Seq Sample Preparation Flow Chart

Figure 1: Sample flow chart with approximate times necessary for each step.



## NEXTflex™ Cell-Free DNA-Seq Sample Preparation Flow Chart

Figure 2: Sample flow chart with approximate times necessary for each step.



## Oligonucleotide Sequences

NEXTflex™	Sequence
P1 Adapter	5' CCACTACGCCTCCGCTTTCCTCTCTATGGGCAGTCGGTGAT 5' ATCACCGACTGCCCATAGAGAGGAAAGCGGAGGCGTAGTGGTT
A1 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGCTAAGGTAACGAT 5' ATCGTTACCTTAGCTGAGTCGGAGACACGC
A2 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGTAAGGAGAACGAT 5' ATCGTTCTCCTTACTGAGTCGGAGACACGC
A3 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGAAGAGGATTTCGAT 5' ATCGAATCCTCTTCTGAGTCGGAGACACGC
A4 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGTACCAAGATCGAT 5' ATCGATCTTGGTACTGAGTCGGAGACACGC
A5 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGCAGAAGGAACGAT 5' ATCGTTCCTTCTGCTGAGTCGGAGACACGC
A6 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGCTGCAAGTTTCGAT 5' ATCGAACTTGCAGCTGAGTCGGAGACACGC
A7 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGTTCGTGATTCGAT 5' ATCGAATCACGAACTGAGTCGGAGACACGC
A8 Adapter	5' CCATCTCATCCCTGCGTGTCTCCGACTCAGTTCGGATAACGAT 5' ATCGTTATCGGAACTGAGTCGGAGACACGC
Primer 1	5' CCACTACGCCTCCGCTTTCCTCTCTATG
Primer 2	5' CCATCTCATCCCTGCGTGTCT

For an electronic list of adapter sequences, please email us at [nextgen@bioscientific.com](mailto:nextgen@bioscientific.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™ DNA Barcodes – 6
514102	NEXTflex™ DNA Barcodes – 12
514103	NEXTflex™ DNA Barcodes – 24
514104	NEXTflex™ DNA 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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We can't wait to hear from you!



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