Assay Guide

BioQule™ DNA-Seq Library Prep Assay

PN: PR-00007 Rev C
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1 Introduction

1.1 Overview

The BioQule™ NGS system is an innovative automated platform that simplifies most commercially available Next Generation Sequencing workflows with the push of a button. It employs simplified micro and macro-scale geometries to efficiently perform DNA extraction, library preparation, and library quantification. DNA libraries prepared using the platform meet high-quality standards regarding coverage bias, yield, and fragment size. It is an open system that can integrate and automate different NGS workflows, including Illumina, Element Biosciences, and Oxford Nanopore Technologies NGS workflows.

BioQule™ opens the door for NGS library preparation automation to low throughput customers, eliminating the need for automation expertise! Effortlessly load your samples onto the pre-plated reagent kit, insert the kit and cartridge into the instrument, close the door, and kickstart the run. Experience an 80% reduction in hands-on time, elevating your lab's efficiency, and say goodbye to human errors caused by pipetting mishaps. BioQule™ brings seamless automation to your fingertips, transforming your workflow with precision and ease.

Features

- Low input requirement for genomic DNA down to 20 ng/sample.
- Complete library prep solution, including size selection beads and fluorescence measurements for quantifying the libraries.
- Robust genome coverage and reliable performance with sequencing bias mitigation.
- Functionally tested with Illumina™ sequencing platform.

BioQule™ DNA-Seq Library Prep Assay Specifications

Input Type:	Genomic DNA (Enzymatic fragmentation step is included in assay)
Input Amount:	20 ng - 500 ng
Number of Reactions: Sample	8
Indexes Available:	384
Sequencing Platforms:	Illumina™ NGS

1.2 Storage and Stability

- The Reagent Plate should be stored at -20 °C upon arrival to laboratory.
- Store the BioQule™ Ligation Master Mix , BioQule™ Fragmentation Enzyme, BioQule™ Optics Standard, BioQule™ Fragmentation Buffer and BioQule™ Resuspension Buffer at -20 °C upon arrival to laboratory.
- Store the BioQule™ Cleanup Beads at 4 °C upon arrival. Do not freeze the BioQule™ Cleanup Beads.

1.3 Product Use

- Do not use the reagents past their expiration date.
- BioQule™ cartridges cannot be re-used. Take care not to damage or misalign the pipette tips or cartridge tubing. Damaged cartridges or tips may result in assay failure.
- BioQule™ assays are intended for research use only.
- This manual is a property of Revvity™ Inc.

1.4 Warnings and Precautions

We strongly recommend that you read the following warnings and precautions. Periodically, optimizations and revisions are made to the components and assay manuals. Therefore, it is important to follow the current protocol, which is available on the Revvity website. If you need further assistance, you may contact your local distributor, or contact us at L3BioQule@Revvity.com.

- Do not use the kit past the expiration date.
- Do not store reagents or pipettes inside the BioQule™ box.
- Wear gloves and eye protection while setting up the reagent plate for the run.
- Do not place any appendages inside the BioQule™ box while it is running.
- Do not freeze the cleanup beads.
- Make sure that the adapter plate is on the correct side. Check the bottom of the plate. Always take note of the adapters that you use!
- Do not use unlabeled or wrong-stored gDNA.
- Unless otherwise stated, keep all components and reaction mixes on ice or a cooled reagent block during routine use.
- Always vortex the beads to achieve a uniform suspension before pipetting.
- To enable multiplexing, please use the appropriate combination of Unique Dual Index Barcodes.

1.5 Prior to Starting

- Register your BioQule by sending email to L3BioQule@Revvity.com and get access to training videos, training material, community assay development and software up-dates.
- Ensure a laboratory temperature of 20 ° - 25 °C (68 ° - 77 °F).
- Identify all reagents and equipment needed before beginning assay preparation.

2 Contents

2.1 Kit Contents

The BioQule™ DNA-Seq Library Prep Kit (P/N 900-000020) has the following components:

- 1x BioQule™ DNA-Seq Library Prep Plate (P/N 810-000021). Each plate comes with a 384 Deep Well Plate, a Plate Map and plate loading template insert.
- 1x BioQule™ Ligation Master Mix (P/N 820-000061).
- 1x BioQule™ Fragmentation Enzyme (P/N 820-000063).
- 1x BioQule™ Fragmentation Buffer (P/N 820-000062).
- 1x BioQule™ Resuspension Buffer (P/N 820-000072).
- 1x BioQule™ Optics Standard (P/N 820-000060).
- 1x BioQule™ Cleanup Beads (P/N 820-000066)

ⓘ This kit contains sufficient materials to prepare 8 DNA-Seq libraries.

2.2 Additional Equipment, Reagents and Labware

- Equipment
  - BioQule™ Cartridge (Revvity, PN. CLS158240)
  - BioQule™ NGS Library Prep Instrument (Revvity, PN. CLS155700)
  - Micropipettes: 0.5-10 µl, 2-20 µl, 20-200 µl, 200-1000 µl
  - Microcentrifuge for 0.2 ml tubes
  - Vortexer
  - Plate Centrifuge for SBS Footprint Deep Well Plates
  - Qubit® 2.0, 3.0 or 4.0 Fluoremeter (ThermoFisher Scientific) or other appropriate fluorometer and accessories for quantification of input DNA and final libraries.
  - LabChip GX Touch (Revvity, PN. CLS137031), or equivalent for electrophoretic analysis of nucleic acids.
- Reagents
  - Isopropyl Alcohol (IPA)
  - Nuclease Free Water
  - NEXTFLEX™ Unique Dual Index Barcodes (Cat # 514150-EVAL16, 514150, 514151, 514152, 514153 or 1,536, Cat # 534100)
- Supplies and labware
  - Filtered Pipette tips, Nuclease Free
  - 0.2 ml PCR strip tubes
  - 10 ml centrifuge tubes

To Order:

- Revvity, www.revvity.com
- Fisher Scientific, www.fishersci.com

3 Planning the Run

3.1 Workflow and Time Required

DNA-Seq Library Prep Assay for BioQule™ Library Prep is a completely automated DNA-Seq library preparation workflow. Each run takes approximately 6 hours with only 30 minutes of hands on time. The figure below demonstrates the difference between manual and automated library preparation.

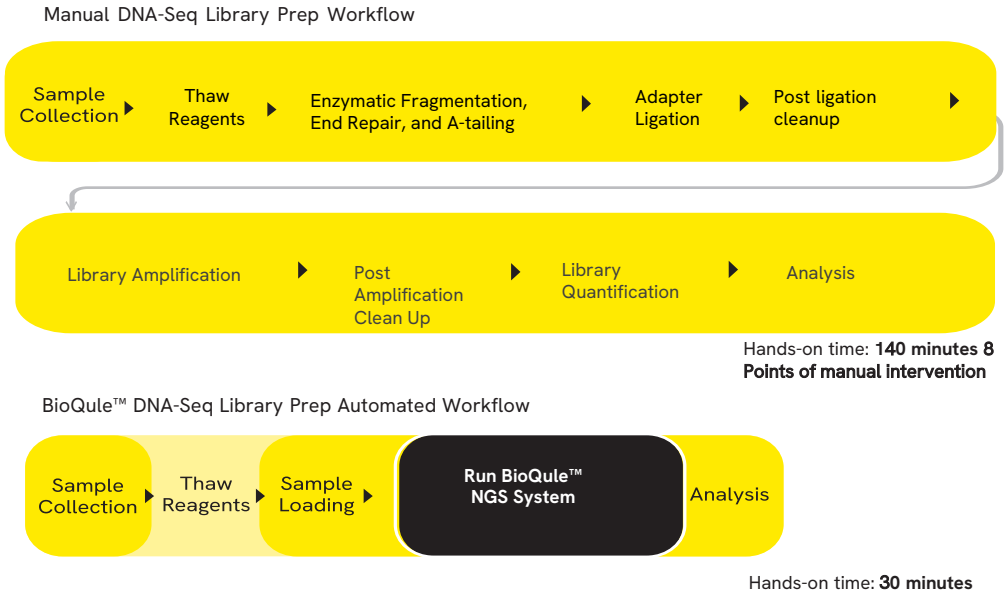

Figure 1. BioQule™ vs Manual Workflow of DNA-Seq Library Prep

3.2 Input DNA Requirements

DNA Quantity

This kit is compatible with a total DNA input of between 20 ng to 500 ng. Accurate quantification of DNA is required to ensure the minimum input is met. Each set of 8 samples should be normalized to the same input amount to ensure equal amplification for each sample.

Guidance for Library Amplification

During the course of run setup, the user will be able to select the number of PCR cycles that the BioQule™ will conduct. The default PCR cycles is 8 but can be adjusted by the user to optimize for specific samples.

3.3 Sequencing Recommendations and Guidelines

BioQule™ DNA-Seq Library Prep produces DNA-seq libraries which are compatible with Illumina Sequencing platforms and should follow Illumina's sequencer specific recommendations.

Index Read Recommendations

NEXTFLEX™ Rapid XP V2 DNA-Seq uses 8 base Unique Dual Indexes (UDI) for sample multiplexing. Both Index 1 (i7) and Index 2 (i5) should be sequenced for the detection of "Barcode Hopping". Revvity UDI's are different from the sequences used by Illumina and can be found in Appendix 6.1.

3.4 Data Analysis

Once Sequencing data has been generated and parsed, data analysis may be employed according to the requirements of the experiment. If the user requires assistance in this pursuit please contact L3BioQule@Revvity.com.

3.5 Library Storage

Libraries prepared by the BioQule™ should be stored at a -20°C without a defrost cycle.

4 Procedure

4.1 Reagent Plate Setup

The steps described below detail how to set up the provided reagent plate for the BioQule™

Step 1. Remove the following materials from -20°C storage and thaw on ice for 30 minutes:

a. BioQule™ DNA-Seq Library Prep Plate
b. BioQule™ Ligation Master Mix .
c. BioQule™ Fragmentation Enzyme.
d. BioQule™ Fragmentation Buffer.
e. BioQule™ Resuspension Buffer.
f. BioQule™ Optics Standard
g. Adapter Index (refer to Additional Equipment, Reagents and Labware section)

Note: *Reagents should be thawed before starting a run. Briefly spin down reagent tubes before loading on plate. The vacuum seal on the BioQule™ DNA-Seq Library Prep Plate reagent plate should be removed to ensure adequate thawing.*

Step 2. Prepare the following materials:

a. BioQule™ cartridge
b. 8 x 10 µl DNA samples in water. DNA concentration should be at least 2 ng/µl in the 10 µl

Note: *BioQule™ cartridges cannot be re-used. Take care not to damage or misalign the pipette tips or cartridge tubing. Assay failure may result.*

Step 3. Remove the BioQule™ Cleaup Beads from 4 °C storage and thaw for 30 minutes at room temperature.

Step 4. Prepare 7 ml of 70% IPA. Vortex thoroughly

Table 1: 70 % IPA

	1x (µl)	35x (µl)
100 % IPA	140	4900
Nuclease Free Water	60	2100
Total	200	7000

Step 5. Once the reagent plate has thawed, centrifuge the BioQule™ DNA-Seq Library Prep Plate at ~1000 rpm for 10 seconds. The Plate will have a reagent loading template attached to it. The black squares represent the holes into which users should pipette reagents.

Step 6. Prepare Adapter for loading:

- Thaw and spin down the adapter plate for 10 seconds.
- Use 10 µL pipette and tips.
- Immediately put back the adapter plate into -20 °C after use.

Table 2: Diluted Adapter

	1x (µl)
Adapter (25 uM)	1
Nuclease Free Water	24
Total	25

Note:

- *Prepare adapter mix separately. DO NOT pool different adapter barcodes.*
- *Do not reuse barcodes.*
- *Always take note of the barcodes you have used.*

Step 7. Prepare the Frag&Prime Mix according to the table below

Table 4: Frag&Prime Mix

	Per Sample (µl)
gDNA (4 ng/ul)*	10
Nuclease Free Water	30
Fragmentation Buffer	5
Total	45

**Based on required DNA input of 40 ng. If the gDNA sample is highly concentrated, add a volume lower than 10 ul, and add more nuclease free water. If the gDNA concentration is too low, less Nuclease Free Water can be added to allow for adding of a volume greater than 10 ul of the gDNA. Total gDNA input amount be between 20 ng and 500 ng.*

Step 8. Follow the correct plate loading template to load reagents in the specified order. The plate is loaded in two stage.

- Use the appropriate Loading Guide (represented by black squares) and Plate Map for each stage
- Do not load the Isopropyl Alcohol until Step 11. Use Loading Guide 1 to load IPA

Stage 1 Loading (Wells A, C, E, G, I, K, M, O)

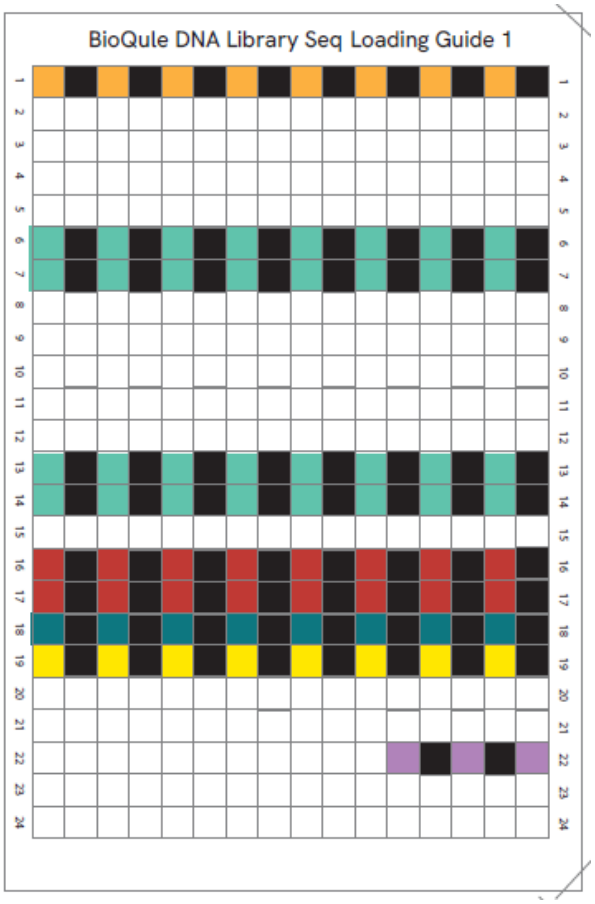

Figure 2. BioQule™ DNA-Seq Library Prep Stage 1 Loading Guide Insert

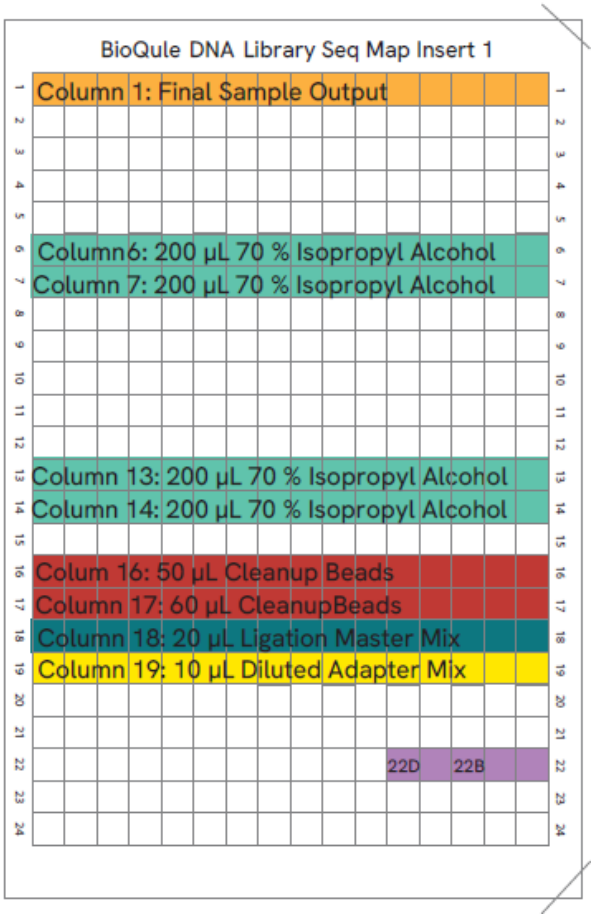

Figure 3. BioQule™ DNA-Seq Library Prep Stage 1 Plate Map

a. Column 16: Vortex the BioQule Cleanup beads and load 50 ul.
b. Column 17: Vortex the BioQule Cleanup beads and load 60 ul.
c. Coulmn 18: Load 20 ul of the Ligation Master Mix.
d. Column 19: Load the 10 ul Diluted Adapter mix.
e. Well 22B: Add 10 ul of the Resuspension Buffer and pipette mix.
f. Well 22D: Add 10 ul of the Optics Standard and pipette mix

Stage 2 Loading : (Wells B, D, F, H, J, L, N, P)

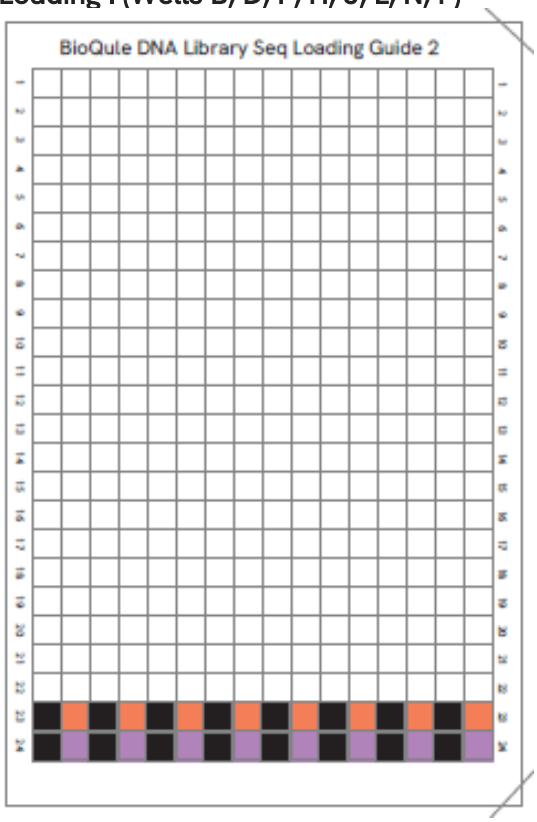

Figure 4. BioQule DNA Seq Library Prep Stage 2 Loading Guide Insert

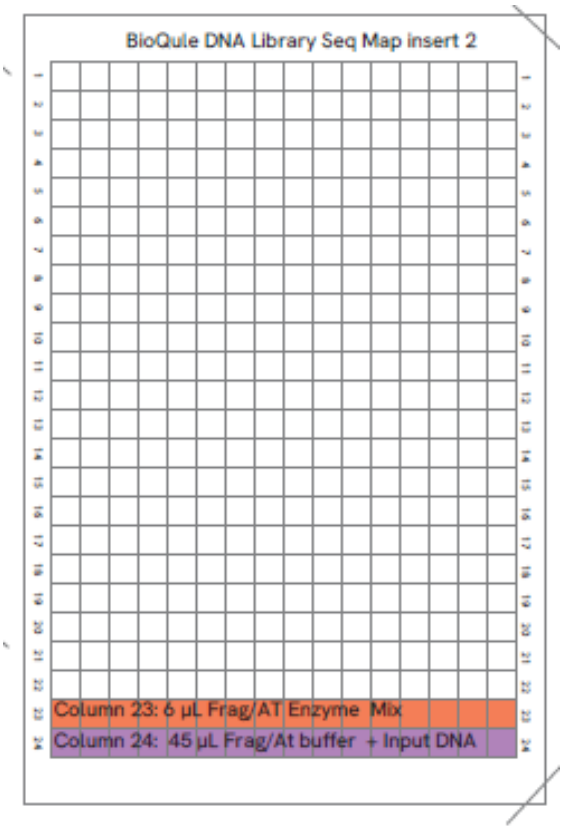

Figure 5. BioQule DNA Seq Library Prep Stage 2 Plate Map

a. Column 23: Briefly centrifuge the Fragmentation Enzyme and load 6 ul .

b. Column 24: Load 45 ul of the Frag&Prime Mix (DNA sample with Fragmentation buffer).

Step 9. Cover the plate with a 384-well pierceable plate seal. Ensure that the wells are aligned with the grid on the plate seal. Centrifuge the plate for 10 seconds (~1000 rpm)

Step 10. Use a clean pipette tip to peel away the precut plate seal sections from the sections 6-7, 13-14 and 21-22.

The Reagent Plate is now ready for final pipetting steps. It should look like Figure 6.

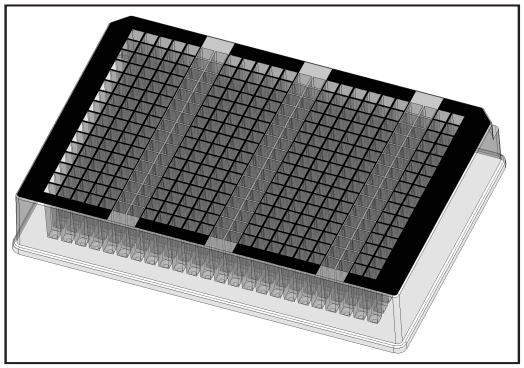

Figure 6: Removing the plate seal from the plate

Step 11. Load 200 µl of 70% IPA into columns 6-7 and and 13-14

- Use loading guide 1 for wells A, C, E, G, I, K, M, O
- Take extreme care to not spill IPA into adjacent wells, and try not to leave droplets on the plate seal.

Note: : If large bubbles are present in any column, use a 10 µl pipette tip to pop them gently. Make sure all the wells have the loading reagent. *Do not invert or tilt the plate after loading the IPA.*

4.2 BioQule™ Run Setup

The steps described below assists users with BioQule setup and run kickoff procedures.

Step 1. Turn on the BioQule™ Library Prep System and associated computer. The two systems should be connected using the provided USB cable. Launch the BioQule™ User Interface on the Computer. Press the Refresh Devices Button to update the Box Connections.

Step 2. Select the BioQule™ machine from the list of options displayed. One computer can run multiple BioQule™ Boxes. Use the Flash Light button to flash the lights and identify the selected machine. Ensure the correct instrument is selected. Press Connect to Device to continue.

Step 3. On the following screen, select the BioQule™ DNA-Seq Library Prep Assay from the list of available assays on the BioQule™ User Interface.

Step 4. Insert the Reagent plate onto BioQule™ plate stage, as shown in Figure 7.

a. Make sure the reagent plate is in the correct orientation – the barcode should be facing forwards toward the user, the black seal is up, and the chamfered corner of the 384 well plate should be oriented to the top left

b. Position the plate on the plate stage. Pressing the plate to the left of the stage to push in the flat spring on the left side of the plate stage, and then back to push in the flat spring on the back of the x-plate, followed by pushing the plate down o position on stage.

c. Ensure the plate is loaded correctly and is flat against the x-plate

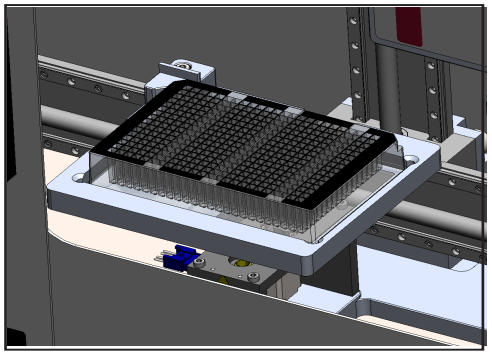

Figure 7: Placing Reagent Plate onto the plate stage

Step 5. The cartridge may now be loaded onto the BioQule™ instrument.

a. Remove the PCR door from the instrument

b. Hold the cartridge with 2 hands, the cannula array in your left, and the tubing scaffold in your right, make sure the barcode on the plastic cartridge is facing you.

c. Push the cannula array into the holder, there is an arrow on the pull-tab indicating the proper orientation.

d. Align the eyelets of the cartridge with the 2 posts on the heating element, with one hand on the cartridge at each eyelet, push the cartridge towards the back of the instrument, onto the heating element.

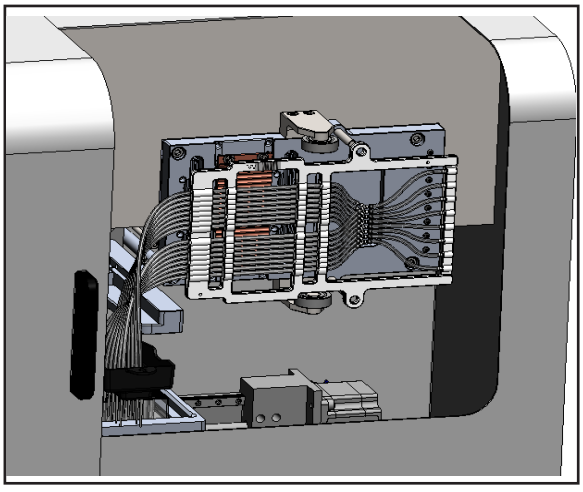

Figure 8: Cartridge insertion into BioQule™

Step 6. Once the cartridge and reagent plate are placed, scan the barcode (using a barcode reader) on each consumable into the correct field on the BioQule™ UI as shown in Figure 9. Press Enter to confirm Barcodes and then press Next.

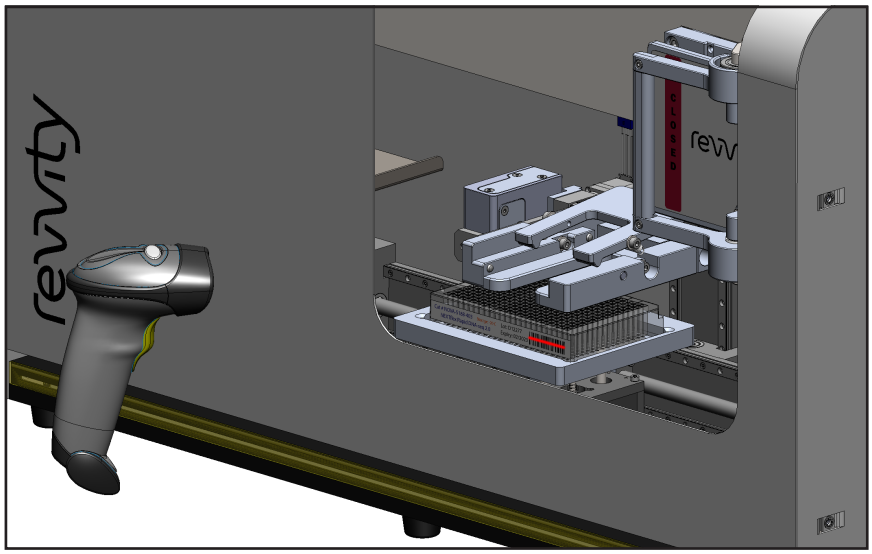

Figure 9: Scan Barcode using Barcode Scanner

Step 7. Next select the fragmentation time, ligation time and number of PCR Cycles desired. These values default to 300 seconds, 15 minutes, and 7 cycles respectively.

Step 8. Place the PCR door with the latch on the left onto BioQule™. Then close the PCR door by turning the latch to the right.

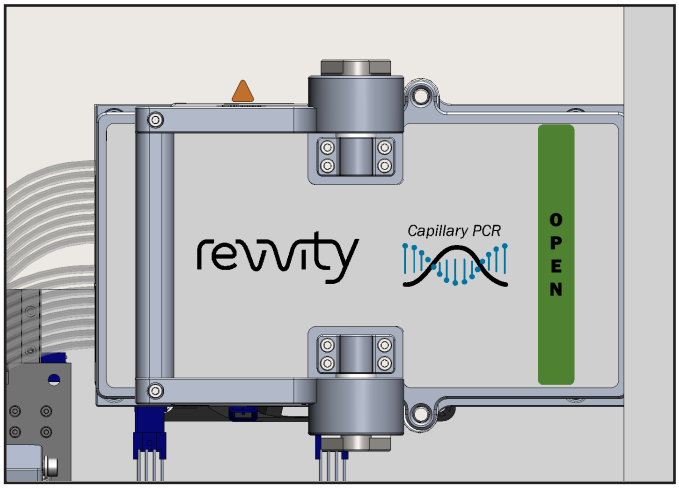

Figure 10: PCR Door Placement

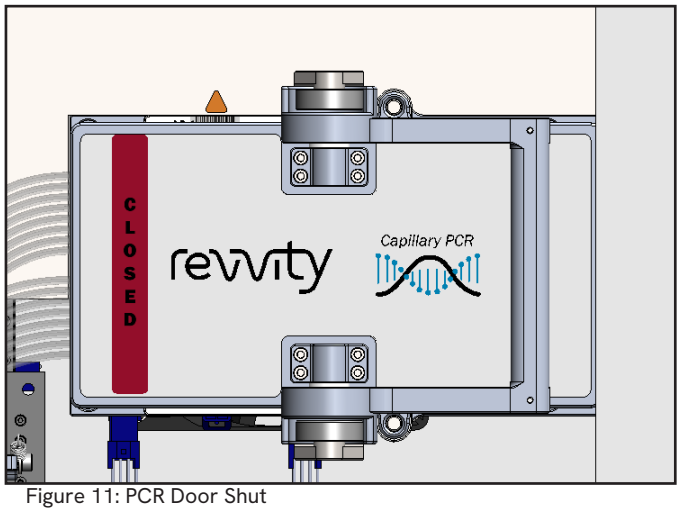

Figure 11: PCR Door Shut

Step 9. Add the names of the Samples and the Sample concentrations to the Spreadsheet. Slide the BioQule™ Door shut and press Run. The Assay will not run unless the door is closed.

- The Assay will now run. It will take approximately 6 hours to complete.
- The Finish button will activate upon completion. DNA Library has been generated and can be found in column 1. Depending on the room temperature and plate time on the instrument after completion of the run, the final volume of the library will be approx 35ul. Output concentration will depend on the number of pcr cycles done and the input amount.

Points to note before running the BioQule™ .

a. Make sure the correct script is selected.
b. Nothing is stored or obstructing plate movement in the BioQule™ . Check underneath the plate and all tracks.
c. All 8 O-rings are in place.
d. The cartridge cannula piece is pushed in completely.
e. The PCR door/Cartridge press is locked and secure.
f. The door should be completely closed.
g. The plate is secure and level on the stage with well/column 1 on the left.

Step10. Spin down the reagent plate and perform quality checks using a LabChip™ GX Touch prior to sequencing. The samples can be stored at -25°C to -15°C for up to 30 days.

Step 11. Assess the quality of the library or pooled libraries using the following method.

- Analyze 1µl library or pooled libraries using the LabChip™ GX Touch with a NGS 3K kit.
- The following figures show typical library size profiles with an average fragment size of 450 bp when analyzed.

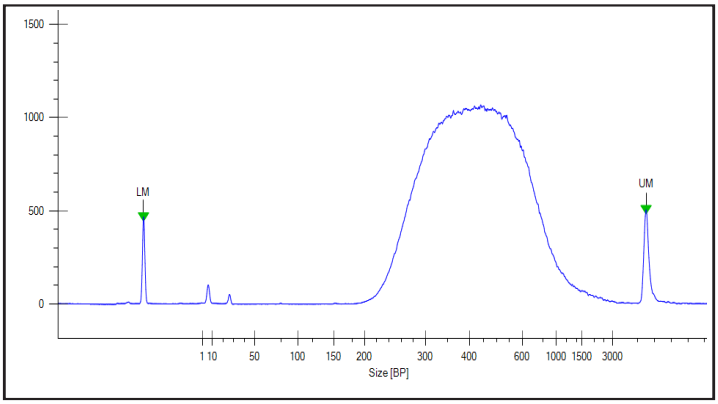

Figure 12. Example Electropherogram Trace for Libraries

Note: An equivalent electrophoresis platform can be used to analyze the library quality in place of the LabChip™ GX Touch.

5 Troubleshooting

See Training Videos starting for video explanations of any troubleshooting queries.

5.1 Low Volume of Library Generated

Possible explanations for this include:

- Evaporation. Please only leave the plate in the instrument for up to 12 hours. Check the humidity (minimum 30-50%) and temperature (20 - 25C) of the lab. The instrument should be far from any devices that vents heat into the atmosphere.
- Incorrect script was used.
- There may have be bubbles injected into manually loaded wells during the reagent plate loading. Pipetting slowly and into the bottom of the wells is recommended.

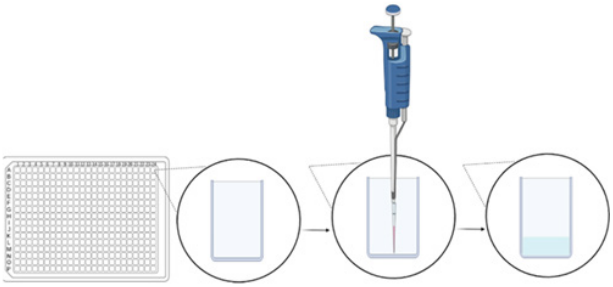

Figure 13: Pipetting directly at bottom of wells

- Large bubbles may have generated in pre-loaded wells upon pipette mixing. Use a 10 µl pipette tip to pop them gently.

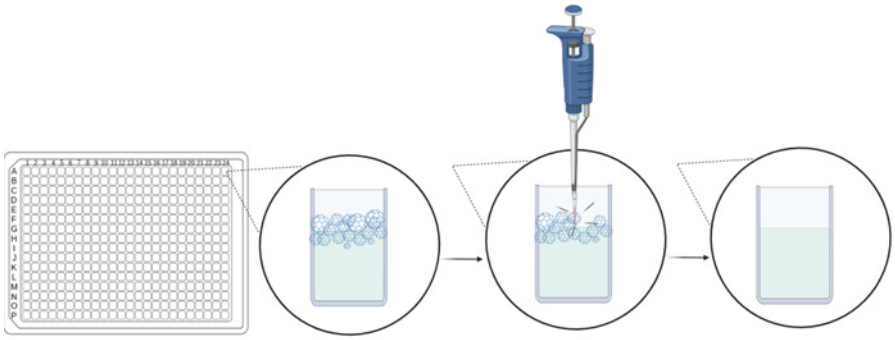

Figure 14: Popping bubbles using a 10 µL Pipette tip

- BioQule™ motor stages may have skewed. Please contact L3LabChip@revvity.com.

5.2 Low Yield Library Generated

Possible explanations for this include:

- Low quality DNA was used. DNA sample quality may vary between preparations. DNA that is heavily nicked or damaged may cause library preparation failure. Absorbance measurements at 260 nm are commonly used to quantify DNA, and 260 nm / 280 nm ratios of 1.8 - 2.0 usually indicate relatively pure DNA. Other quantification methods using fluorescent dyes may also be used. The user should be aware that contaminating RNA, nucleotides, and single-stranded DNA may affect the amount of usable DNA in sample preparation.
- Input DNA amount was incorrect. Input DNA amount should be measured by Qubit or another device. Low input or poor quality of fragmented DNA results in low yield.
- Incorrect pipetting of ligase may result in low yield and high adapters. Ligase is highly viscous. Carefully insert the pipette tip into the bottom of the well, slowly dispense all liquid by depressing the pipette head all the way down, and then move up the pipette tip against the well wall. Once the tip is out of plate well, then un-depress the pipette.

5.3 High Adapter Dimer

Possible explanations for this include:

- Incorrect adapter dilution was used.
- IPA was not freshly made and/or has expired.
- The cleanup beads were accidentally frozen by mistake or due to a shipment error
- The Cleanup Beads were not well resuspended prior to loading onto the BioQule™.

6 Appendix

6.1 Index (UDI) Sequences

Index or Barcode Sequences to be used on BioQule™ Automated Library Prep for NEXTFLEX™ Rapid XP V2 DNA-seq are given in the Table. These index sequences correspond to those used in other Revvity® NEXTFLEX™ kits.

Sample Name	I7 Index Name	Index 1	I5 Index Name	Index 2
UDIBCQC001	D7udi_1	AATCGTTA	D5udi_1	ACGTTATT
UDIBCQC002	D7udi_2	GTCTACAT	D5udi_2	TTCAAGAA
UDIBCQC003	D7udi_3	CGCTGCTC	D5udi_3	GATCTGCC
UDIBCQC004	D7udi_4	GATCAACA	D5udi_4	TAACATAG
UDIBCQC005	D7udi_5	CGAAGGAC	D5udi_5	GCGTCAAC
UDIBCQC006	D7udi_6	GATGCCGG	D5udi_6	TCGTAGAT
UDIBCQC007	D7udi_7	CTACGAAG	D5udi_7	CTGTCGAG
UDIBCQC008	D7udi_8	GATGCGTC	D5udi_8	GCAGCCTC
UDIBCQC009	D7udi_9	CTACGGCA	D5udi_9	CTACGAGG
UDIBCQC010	D7udi_10	GATTCCTT	D5udi_10	TGCCTATG
UDIBCQC011	D7udi_11	CTACTCGA	D5udi_11	GTTCATCT
UDIBCQC012	D7udi_12	GATTCGAG	D5udi_12	ATACTCGG
UDIBCQC013	D7udi_13	AATCGGCG	D5udi_13	TCAATATT
UDIBCQC014	D7udi_14	TTCGCCGA	D5udi_14	CGGTATAC
UDIBCQC015	D7udi_15	CTGGCCTC	D5udi_15	GTTGGATC
UDIBCQC016	D7udi_16	GAACTTAT	D5udi_16	GCGTATCT
UDIBCQC017	D7udi_17	CGTATTGG	D5udi_17	AAGATACC
UDIBCQC018	D7udi_18	GAAGCACA	D5udi_18	GCCAGAGG
UDIBCQC019	D7udi_19	CTTAATAC	D5udi_19	CACAATGG
UDIBCQC020	D7udi_20	GAAGTCTT	D5udi_20	ACCGTAGT
UDIBCQC021	D7udi_21	GAAGAGGC	D5udi_21	TAGCACTT
UDIBCQC022	D7udi_22	CGGATAAC	D5udi_22	CGTTCGGC
UDIBCQC023	D7udi_23	GAATCTGG	D5udi_23	CGTGGACA
UDIBCQC024	D7udi_24	CTGATTGA	D5udi_24	AGTGTGTC
UDIBCQC025	D7udi_25	AATCCGTT	D5udi_25	AGCATATT
UDIBCQC026	D7udi_26	TGCGTACA	D5udi_26	TATGAGAA
UDIBCQC027	D7udi_27	GAATCAAT	D5udi_27	ATCACAGA
UDIBCQC028	D7udi_28	TGAGTCAG	D5udi_28	AAGTTCGG
UDIBCQC029	D7udi_29	GAATGCTC	D5udi_29	TGTTAGAC
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UDIBCQC031	D7udi_31	CTTATGAA	D5udi_31	ACATTGGC
UDIBCQC032	D7udi_32	TCGGCACC	D5udi_32	GACGTTGG
UDIBCQC033	D7udi_33	AAGAAGCG	D5udi_33	TTATCTAC
UDIBCQC034	D7udi_34	CTCACGAT	D5udi_34	GCCGTAAG
UDIBCQC035	D7udi_35	TCGGTCGA	D5udi_35	GCACTTGG
UDIBCQC036	D7udi_36	TCGGTAAG	D5udi_36	TGAGTTAG
UDIBCQC037	D7udi_37	AAGATACA	D5udi_37	CAGATATT
UDIBCQC038	D7udi_38	GTCGCTGT	D5udi_38	TGATATAA
UDIBCQC039	D7udi_39	TCGGATGT	D5udi_39	ATCCGCAG
UDIBCQC040	D7udi_40	CGAGCCGG	D5udi_40	CAAGCCGC
UDIBCQC041	D7udi_41	CGATTATC	D5udi_41	ATCAACTC
UDIBCQC042	D7udi_42	TCGAAGCT	D5udi_42	CTCAGTGC
UDIBCQC043	D7udi_43	CTATCATT	D5udi_43	AGGTGGTC

Sample Name	I7 Index Name	Index 1	I5 Index Name	Index 2
UDIBCQC044	D7udi_44	CGCGCCAA	D5udi_44	CCTAGCCA
UDIBCQC045	D7udi_45	CGAACGGA	D5udi_45	CCGGTAGG
UDIBCQC046	D7udi_46	CTACTGAC	D5udi_46	CATCCTCC
UDIBCQC047	D7udi_47	TCTTAAGT	D5udi_47	ATTCAGCG
UDIBCQC048	D7udi_48	TTAGAGTC	D5udi_48	TCGTCACA
UDIBCQC049	D7udi_49	AAGACGAA	D5udi_49	AATCTATT
UDIBCQC050	D7udi_50	TTATTATG	D5udi_50	TGCGCTAA
UDIBCQC051	D7udi_51	CGCTATTA	D5udi_51	ACGGCCGC
UDIBCQC052	D7udi_52	TCTATCAG	D5udi_52	GGTTACTG
UDIBCQC053	D7udi_53	CGGTGGTA	D5udi_53	TACTAGGC
UDIBCQC054	D7udi_54	TCACCAAT	D5udi_54	GCGCCGTG
UDIBCQC055	D7udi_55	CTGGAAGC	D5udi_55	TCTGCACC
UDIBCQC056	D7udi_56	TCCTCGAT	D5udi_56	GCAGTTAC
UDIBCQC057	D7udi_57	AAGAGAGC	D5udi_57	ACTGGCTG
UDIBCQC058	D7udi_58	TCAACGAG	D5udi_58	GGTTGACG
UDIBCQC059	D7udi_59	TGCGAGAC	D5udi_59	TCGCCGGC
UDIBCQC060	D7udi_60	CCTGGTGT	D5udi_60	CCGGAGGC
UDIBCQC061	D7udi_61	AAGTAAGT	D5udi_61	GGACTATT
UDIBCQC062	D7udi_62	TGACTGAA	D5udi_62	ACGTCTAA
UDIBCQC063	D7udi_63	AAGACTGT	D5udi_63	TAGTCCAC
UDIBCQC064	D7udi_64	CAATGATG	D5udi_64	CGTCCGTG
UDIBCQC065	D7udi_65	CACAGTAA	D5udi_65	CTCTAGTG
UDIBCQC066	D7udi_66	TGGTCATT	D5udi_66	CCATCTGC
UDIBCQC067	D7udi_67	CAACCGTG	D5udi_67	CGTGAGAG
UDIBCQC068	D7udi_68	TGGTGCAC	D5udi_68	GTGATTCC
UDIBCQC069	D7udi_69	CCACAATG	D5udi_69	CGTCAACG
UDIBCQC070	D7udi_70	TGTGTGCC	D5udi_70	ACCTGATG
UDIBCQC071	D7udi_71	CACCACGG	D5udi_71	TTACAACG
UDIBCQC072	D7udi_72	TGTGTTAA	D5udi_72	ACCGTGCC
UDIBCQC073	D7udi_73	AAGTTATC	D5udi_73	TTGCTATT
UDIBCQC074	D7udi_74	GTACAGCT	D5udi_74	ACCGATCA
UDIBCQC075	D7udi_75	CAACTGCT	D5udi_75	ATACTACT
UDIBCQC076	D7udi_76	CATGATGA	D5udi_76	CCTCTAAC
UDIBCQC077	D7udi_77	TGACTACT	D5udi_77	CTGTAAGG
UDIBCQC078	D7udi_78	CAGAAGAT	D5udi_78	CAATGTAC
UDIBCQC079	D7udi_79	TGAGGCGC	D5udi_79	TGGTCTCC
UDIBCQC080	D7udi_80	CAGGTTCC	D5udi_80	GGTGTTCG
UDIBCQC081	D7udi_81	TGAACAGG	D5udi_81	TTGTTCTC
UDIBCQC082	D7udi_82	CAGTGTGG	D5udi_82	GATTCACA
UDIBCQC083	D7udi_83	TTCCACCA	D5udi_83	CCTTAACC
UDIBCQC084	D7udi_84	CCGCTGTT	D5udi_84	TGCGGTCT
UDIBCQC085	D7udi_85	AAGTTGGA	D5udi_85	CCTGTATT
UDIBCQC086	D7udi_86	GGACAACG	D5udi_86	GGCCATCA

Sample Name	I7 Index Name	Index 1	I5 Index Name	Index 2
UDIBCQC087	D7udi_87	TTCGAACC	D5udi_87	AGGTGACA
UDIBCQC088	D7udi_88	CAGACCAC	D5udi_88	GCCGAAGC
UDIBCQC089	D7udi_89	TTCTGGTG	D5udi_89	ACCACTGG
UDIBCQC090	D7udi_90	CAATCGAA	D5udi_90	GCGTGTGC
UDIBCQC091	D7udi_91	AAGTACAG	D5udi_91	GACGTGAC
UDIBCQC092	D7udi_92	CCGTGCCA	D5udi_92	GGAGCTGC
UDIBCQC093	D7udi_93	CATTGCAC	D5udi_93	GCTGCATG
UDIBCQC094	D7udi_94	TTACCTGG	D5udi_94	GCAATCGT
UDIBCQC095	D7udi_95	CTGCAACG	D5udi_95	CGAATGTC
UDIBCQC096	D7udi_96	TACTGTTA	D5udi_96	GTATTCGC
UDIBCQC097	D7udi_97	AAGTGTAT	D5udi_97	CATTAATT
UDIBCQC098	D7udi_98	GTCCACTC	D5udi_98	GGAATTAA
UDIBCQC099	D7udi_99	CTTGCTAT	D5udi_99	GTTCCTTC
UDIBCQC100	D7udi_100	TACATAGA	D5udi_100	TATGCCTG
UDIBCQC101	D7udi_101	TAGCCGAT	D5udi_101	AGTATTGG
UDIBCQC102	D7udi_102	CGATCCAC	D5udi_102	ATGCGCGA
UDIBCQC103	D7udi_103	TAGCGTTG	D5udi_103	GTTCACAC
UDIBCQC104	D7udi_104	CTCATCAC	D5udi_104	GTGCCACC
UDIBCQC105	D7udi_105	TATGCGGT	D5udi_105	AGCACCTA
UDIBCQC106	D7udi_106	TAACTCGC	D5udi_106	AACCGCTC
UDIBCQC107	D7udi_107	CGTACGTT	D5udi_107	CTAATCCT
UDIBCQC108	D7udi_108	TAAGTACC	D5udi_108	TGGCTCAC
UDIBCQC109	D7udi_109	AAGTCGTG	D5udi_109	GCATAATT
UDIBCQC110	D7udi_110	TTCAGAAC	D5udi_110	CGGCGTAA
UDIBCQC111	D7udi_111	GTTATATA	D5udi_111	ATCACTAC
UDIBCQC112	D7udi_112	ACCGCTAT	D5udi_112	TGCAACCA
UDIBCQC113	D7udi_113	ACCGTCCT	D5udi_113	GGTCGGAC
UDIBCQC114	D7udi_114	TGTCTAAC	D5udi_114	CGGCTGGC
UDIBCQC115	D7udi_115	ACCGAGGT	D5udi_115	GACACGAG
UDIBCQC116	D7udi_116	ACCGATTA	D5udi_116	GCCACGGC
UDIBCQC117	D7udi_117	GTTCTACT	D5udi_117	GTGGCTAC
UDIBCQC118	D7udi_118	ACCTGACT	D5udi_118	TATAAGTC
UDIBCQC119	D7udi_119	GGTAATCG	D5udi_119	CGACGTTC
UDIBCQC120	D7udi_120	ACCTTAGA	D5udi_120	CTACGCAT
UDIBCQC121	D7udi_121	AAGGAGTT	D5udi_121	ATCTAATT
UDIBCQC122	D7udi_122	TGAAGCCA	D5udi_122	TATCGTAA
UDIBCQC123	D7udi_123	GTGTTGTA	D5udi_123	TTGTACAG
UDIBCQC124	D7udi_124	ACCACACG	D5udi_124	CAACCACG
UDIBCQC125	D7udi_125	ACCAGGAC	D5udi_125	CCGCTACA
UDIBCQC126	D7udi_126	TTGGCAGG	D5udi_126	CATGACAC
UDIBCQC127	D7udi_127	ACCATTAA	D5udi_127	ACCGGTTC
UDIBCQC128	D7udi_128	TTGTAGAT	D5udi_128	TCAGAGTG
UDIBCQC129	D7udi_129	ACCATATC	D5udi_129	AACGTGTA
UDIBCQC130	D7udi_130	TTGGTGGC	D5udi_130	AGGCACTC
UDIBCQC131	D7udi_131	ACCAACAT	D5udi_131	GGACCGTC
UDIBCQC132	D7udi_132	GTCTGTGC	D5udi_132	AGCATCAG
UDIBCQC133	D7udi_133	AAGGCAAT	D5udi_133	TGGTAATT
UDIBCQC134	D7udi_134	TGCATTGC	D5udi_134	AACAGGAC
UDIBCQC135	D7udi_135	ACGCCACT	D5udi_135	CTGTTAAC
UDIBCQC136	D7udi_136	AAGTCTCC	D5udi_136	TACAGGCT
UDIBCQC137	D7udi_137	GGATCTCT	D5udi_137	AGCAACGT
UDIBCQC138	D7udi_138	ACGCGATC	D5udi_138	GCAACACC

Sample Name	I7 Index Name	Index 1	I5 Index Name	Index 2
UDIBCQC139	D7udi_139	GGATAATA	D5udi_139	TAGTACCA
UDIBCQC140	D7udi_140	ACGCTTAT	D5udi_140	CAATGATG
UDIBCQC141	D7udi_141	TTAGGTTG	D5udi_141	CAATCGTC
UDIBCQC142	D7udi_142	ACGCACAA	D5udi_142	TTCGGCCG
UDIBCQC143	D7udi_143	TGAATATA	D5udi_143	GGCGGCAG
UDIBCQC144	D7udi_144	TGCTCCGC	D5udi_144	CGGTTAGT
UDIBCQC145	D7udi_145	AAGCAATA	D5udi_145	TCTCAATT
UDIBCQC146	D7udi_146	TTATGTAT	D5udi_146	CTCTTGAA
UDIBCQC147	D7udi_147	ACGGCAGA	D5udi_147	TTGCGGAC
UDIBCQC148	D7udi_148	GGACTCTG	D5udi_148	CTACCTTG
UDIBCQC149	D7udi_149	GTACGTAC	D5udi_149	GAGTCGCT
UDIBCQC150	D7udi_150	GGAAGGTA	D5udi_150	GATACTAC
UDIBCQC151	D7udi_151	ACGTCCAT	D5udi_151	TTCGCCAC
UDIBCQC152	D7udi_152	ACGTGTTG	D5udi_152	GCGCACGT
UDIBCQC153	D7udi_153	TGAAGAAT	D5udi_153	CTGTCTTC
UDIBCQC154	D7udi_154	ACGTAGTC	D5udi_154	ATCTGCGC
UDIBCQC155	D7udi_155	AAGGATAA	D5udi_155	ATGTCTCT
UDIBCQC156	D7udi_156	GGCGAGGA	D5udi_156	AACAAGTG
UDIBCQC157	D7udi_157	AACAAGGC	D5udi_157	GACCAATT
UDIBCQC158	D7udi_158	TTGGTCCG	D5udi_158	AGTGTTAA
UDIBCQC159	D7udi_159	ACGAGCCT	D5udi_159	CGCTGAGC
UDIBCQC160	D7udi_160	GGAGATTC	D5udi_160	GTCTGAAC
UDIBCQC161	D7udi_161	TGCGCGCT	D5udi_161	CGCAACTG
UDIBCQC162	D7udi_162	ACGATCTA	D5udi_162	CATATTGC
UDIBCQC163	D7udi_163	TGCTGAGG	D5udi_163	ACGTTGCG
UDIBCQC164	D7udi_164	ACTCCTCC	D5udi_164	ATCTCACC
UDIBCQC165	D7udi_165	ACTCTACG	D5udi_165	TCAGCTGG
UDIBCQC166	D7udi_166	TTCGTTCT	D5udi_166	TGCTCAAC
UDIBCQC167	D7udi_167	TGCAGTCG	D5udi_167	CACTACAG
UDIBCQC168	D7udi_168	TGCCGTAA	D5udi_168	GGATGCAC
UDIBCQC169	D7udi_169	AACAGTTG	D5udi_169	AGTGAATT
UDIBCQC170	D7udi_170	TGTTAACA	D5udi_170	TCACTGAA
UDIBCQC171	D7udi_171	ACTTCCTG	D5udi_171	TCGCGACT
UDIBCQC172	D7udi_172	TGAATGCG	D5udi_172	CGATATGG
UDIBCQC173	D7udi_173	ACTTGTAC	D5udi_173	CCATGCTT
UDIBCQC174	D7udi_174	ACTACTTA	D5udi_174	TAGACACG
UDIBCQC175	D7udi_175	TGAGATCG	D5udi_175	GCAACTGA
UDIBCQC176	D7udi_176	ACTAGCTC	D5udi_176	CACTCTCG
UDIBCQC177	D7udi_177	TTATCAAC	D5udi_177	CGTACTCG
UDIBCQC178	D7udi_178	TGCTTGTC	D5udi_178	TGAGACAC
UDIBCQC179	D7udi_179	AAGGTAGG	D5udi_179	AGCGATGG
UDIBCQC180	D7udi_180	TGGTATGG	D5udi_180	GAGCGAAG
UDIBCQC181	D7udi_181	AACACATA	D5udi_181	TTAGAATT
UDIBCQC182	D7udi_182	TGGTGTCT	D5udi_182	CAGATGAA
UDIBCQC183	D7udi_183	ACACTAAC	D5udi_183	TTCACTGT
UDIBCQC184	D7udi_184	TTGTGTTC	D5udi_184	TCACATCT
UDIBCQC185	D7udi_185	ACACACCT	D5udi_185	CAGTTGCC
UDIBCQC186	D7udi_186	GGTGTCCG	D5udi_186	AGACGCTG
UDIBCQC187	D7udi_187	ACACATTC	D5udi_187	ACCGACAG
UDIBCQC188	D7udi_188	TTGCTTAA	D5udi_188	AACGCCGA
UDIBCQC189	D7udi_189	ACAGCCTT	D5udi_189	CGCGTGTG
UDIBCQC190	D7udi_190	TTGCAGTA	D5udi_190	TGTTGGCT

Sample Name	I7 Index Name	Index 1	I5 Index Name	Index 2
UDIBCQC191	D7udi_191	ACAGGCAG	D5udi_191	AACTTGCT
UDIBCQC192	D7udi_192	TTGCCATC	D5udi_192	TGACGCGT
UDIBCQC193	D7udi_193	ATAATGTA	D5udi_193	GGTTCATT
UDIBCQC194	D7udi_194	TCGTACCG	D5udi_194	CCACTTCC
UDIBCQC195	D7udi_195	GTTATTAT	D5udi_195	GCTTAGCG
UDIBCQC196	D7udi_196	ACAGAAGC	D5udi_196	GCTATGAC
UDIBCQC197	D7udi_197	TTGATAAT	D5udi_197	ATGGTCAC
UDIBCQC198	D7udi_198	ACATCGGA	D5udi_198	TCAACTTC
UDIBCQC199	D7udi_199	ACATCTAG	D5udi_199	CGGTAGCG
UDIBCQC200	D7udi_200	GTGAGTGT	D5udi_200	AAGAGGCG
UDIBCQC201	D7udi_201	ACATCACC	D5udi_201	TCCAGAAC
UDIBCQC202	D7udi_202	TTGAACGC	D5udi_202	GGCATCTC
UDIBCQC203	D7udi_203	ACATGGAT	D5udi_203	GGCTAACC
UDIBCQC204	D7udi_204	TGGCAGAG	D5udi_204	GTCGAGCC
UDIBCQC205	D7udi_205	ATAAGGCT	D5udi_205	GCCACATT
UDIBCQC206	D7udi_206	TCTTACTC	D5udi_206	CTTGTGAC
UDIBCQC207	D7udi_207	ACATGATA	D5udi_207	TATCTACG
UDIBCQC208	D7udi_208	TTGCCTCT	D5udi_208	TAGCCGCA
UDIBCQC209	D7udi_209	ACATTCTC	D5udi_209	AGAGTTGT
UDIBCQC210	D7udi_210	ACATATGT	D5udi_210	CTGCGATC
UDIBCQC211	D7udi_211	GTTGGTAG	D5udi_211	ATGTTCCA
UDIBCQC212	D7udi_212	ACAACCGC	D5udi_212	GGTATGTG
UDIBCQC213	D7udi_213	AAGCAGAC	D5udi_213	TTCTTAGC
UDIBCQC214	D7udi_214	ACAAGGTG	D5udi_214	TGGTTAAG
UDIBCQC215	D7udi_215	ACAAGAGT	D5udi_215	TTGAAGGC
UDIBCQC216	D7udi_216	TTGGAATT	D5udi_216	TTCCAGTT
UDIBCQC217	D7udi_217	ATAACAGA	D5udi_217	CTTCCATT
UDIBCQC218	D7udi_218	TATTGTCG	D5udi_218	GAATTGAA
UDIBCQC219	D7udi_219	ACAATGCC	D5udi_219	TAAGGACG
UDIBCQC220	D7udi_220	TATGGTTC	D5udi_220	TACCGGTG
UDIBCQC221	D7udi_221	AGCCACAG	D5udi_221	TGGTTCCT
UDIBCQC222	D7udi_222	GCTATCGA	D5udi_222	GGAAGATC
UDIBCQC223	D7udi_223	AGCGCTCG	D5udi_223	ACAAGCCG
UDIBCQC224	D7udi_224	TGCGCTTC	D5udi_224	GTGTCGGC
UDIBCQC225	D7udi_225	TCTACGCC	D5udi_225	GTACGCCG
UDIBCQC226	D7udi_226	TATCACAA	D5udi_226	AATGAGGC
UDIBCQC227	D7udi_227	AGCTTGGT	D5udi_227	TCGTGCCG
UDIBCQC228	D7udi_228	AGCTTATG	D5udi_228	CTACAGGC
UDIBCQC229	D7udi_229	ATAACGAC	D5udi_229	AGGCCATT
UDIBCQC230	D7udi_230	GATGGAGT	D5udi_230	GCCTGGAA
UDIBCQC231	D7udi_231	TGATCTAA	D5udi_231	GAGGTTAA
UDIBCQC232	D7udi_232	AGCTATAT	D5udi_232	TCCTAACG
UDIBCQC233	D7udi_233	AGCAGAGA	D5udi_233	ATTATGGC
UDIBCQC234	D7udi_234	GACGTAAG	D5udi_234	GGCTTGGC
UDIBCQC235	D7udi_235	AGGCCTGA	D5udi_235	TGACCGAG
UDIBCQC236	D7udi_236	TAAGATTA	D5udi_236	AGCCTGCG
UDIBCQC237	D7udi_237	AGGCGAAT	D5udi_237	GAGGACGC
UDIBCQC238	D7udi_238	TTGTTCTT	D5udi_238	ACTTGTAG
UDIBCQC239	D7udi_239	TACTCCTG	D5udi_239	GGACACGC
UDIBCQC240	D7udi_240	GACTGGCG	D5udi_240	TCAGTCGC
UDIBCQC241	D7udi_241	ATATATAC	D5udi_241	CAAGCATT
UDIBCQC242	D7udi_242	TAGATCGG	D5udi_242	TTGATTAA

Sample Name	I7 Index Name	Index 1	I5 Index Name	Index 2
UDIBCQC243	D7udi_243	AGGCAAGC	D5udi_243	GTCCAGAG
UDIBCQC244	D7udi_244	TCCAGGTA	D5udi_244	ACTGGAGC
UDIBCQC245	D7udi_245	AGGTCAAG	D5udi_245	ATAACGCG
UDIBCQC246	D7udi_246	TACACTGG	D5udi_246	GATTGAGC
UDIBCQC247	D7udi_247	TCCTTGCG	D5udi_247	CACATGCG
UDIBCQC248	D7udi_248	AGGACCTC	D5udi_248	TTGGCAGC
UDIBCQC249	D7udi_249	TAAGCATT	D5udi_249	ATAGTTCG
UDIBCQC250	D7udi_250	AGGATATT	D5udi_250	GAGACAGC
UDIBCQC251	D7udi_251	TCATTCGG	D5udi_251	AACCGTCG
UDIBCQC252	D7udi_252	AGTCCGAC	D5udi_252	TGTGAAGC
UDIBCQC253	D7udi_253	ATATTACA	D5udi_253	TGCGCATT
UDIBCQC254	D7udi_254	TCTCCGTG	D5udi_254	ACGATTCA
UDIBCQC255	D7udi_255	TAATAGGA	D5udi_255	CTGGTTAG
UDIBCQC256	D7udi_256	TTGTAAGA	D5udi_256	TCACAAGC
UDIBCQC257	D7udi_257	GAATGTAA	D5udi_257	AGTGCCAG
UDIBCQC258	D7udi_258	AGTCAATT	D5udi_258	GACCGTGC
UDIBCQC259	D7udi_259	GAACAATT	D5udi_259	AATCCAAG
UDIBCQC260	D7udi_260	AGTGGTCA	D5udi_260	TGATGTGC
UDIBCQC261	D7udi_261	TACAATAT	D5udi_261	TATTGAAG
UDIBCQC262	D7udi_262	AGTGTGAG	D5udi_262	ATACCTGC
UDIBCQC263	D7udi_263	GAACCTTA	D5udi_263	GGACTCAG
UDIBCQC264	D7udi_264	AGTGTACT	D5udi_264	AAGTATGC
UDIBCQC265	D7udi_265	TATACCAT	D5udi_265	GTGGCATT
UDIBCQC266	D7udi_266	ATCGTGGA	D5udi_266	CAACGGCC
UDIBCQC267	D7udi_267	GCAAGACA	D5udi_267	GTCTATGC
UDIBCQC268	D7udi_268	TACAGGCC	D5udi_268	GGCGAATG
UDIBCQC269	D7udi_269	AGTTCCGT	D5udi_269	ACGCGGCC
UDIBCQC270	D7udi_270	TCAATTAT	D5udi_270	CCTTCAGG
UDIBCQC271	D7udi_271	AGTTCATA	D5udi_271	TGAAGGCC
UDIBCQC272	D7udi_272	TCACCGGC	D5udi_272	AGTAAGCC
UDIBCQC273	D7udi_273	TACAACTA	D5udi_273	CAGACCGG
UDIBCQC274	D7udi_274	AGTTGGCT	D5udi_274	GGAGTGCC
UDIBCQC275	D7udi_275	TACGTCTC	D5udi_275	ACGACATG
UDIBCQC276	D7udi_276	AGTACGCG	D5udi_276	TTATTGCC
UDIBCQC277	D7udi_277	TATACATC	D5udi_277	TTCAGATT
UDIBCQC278	D7udi_278	ATCGTTAG	D5udi_278	ACTTCGCA
UDIBCQC279	D7udi_279	GAATTACG	D5udi_279	TCTCCTTG
UDIBCQC280	D7udi_280	AGTACTGC	D5udi_280	CTAAGACC
UDIBCQC281	D7udi_281	TACTAACG	D5udi_281	ATTACTTG
UDIBCQC282	D7udi_282	AGTATGTC	D5udi_282	TACTGACC
UDIBCQC283	D7udi_283	TAAGTGTG	D5udi_283	GTGACTGG
UDIBCQC284	D7udi_284	ATATAAGG	D5udi_284	ACATGACC
UDIBCQC285	D7udi_285	ATAGAATA	D5udi_285	GGTCGTTG
UDIBCQC286	D7udi_286	TCTAGAGA	D5udi_286	CAAGAACC
UDIBCQC287	D7udi_287	ATAGGCCA	D5udi_287	GTATGTTG
UDIBCQC288	D7udi_288	ATAGCGGT	D5udi_288	AATCAACC
UDIBCQC289	D7udi_289	ATATCCTA	D5udi_289	CTATTATT
UDIBCQC290	D7udi_290	GATAGGAT	D5udi_290	TATCCGAC
UDIBCQC291	D7udi_291	ATACTGCG	D5udi_291	ACAATGTG
UDIBCQC292	D7udi_292	TCTTCCGA	D5udi_292	TTGTAACC
UDIBCQC293	D7udi_293	ATACCTAT	D5udi_293	AATTCGTG
UDIBCQC294	D7udi_294	TCGTTATA	D5udi_294	TGCATACC

UDIBCQC295	D7udi_295	TAATTAGT	D5udi_295	AGGTCCTG
UDIBCQC296	D7udi_296	ATTATTCG	D5udi_296	GCCAGTCC
UDIBCQC297	D7udi_297	TAATAATC	D5udi_297	TCGCTCTG
UDIBCQC298	D7udi_298	ATTATCGC	D5udi_298	CTAGCTCC
UDIBCQC299	D7udi_299	TAATATAG	D5udi_299	CTAAGCTG
UDIBCQC300	D7udi_300	ATTAGACA	D5udi_300	GTTGGCGG
UDIBCQC301	D7udi_301	ATAGATCT	D5udi_301	CGCATAGG
UDIBCQC302	D7udi_302	TAGAGCTC	D5udi_302	TCGGATCC
UDIBCQC303	D7udi_303	ATTACAAT	D5udi_303	AACAATCC
UDIBCQC304	D7udi_304	ATTGAAGT	D5udi_304	TTCACCTG
UDIBCQC305	D7udi_305	ATTGATTC	D5udi_305	AATGTTCC
UDIBCQC306	D7udi_306	TAACTAAG	D5udi_306	GAGTCTTG
UDIBCQC307	D7udi_307	ATTGACAA	D5udi_307	CGCCGCAC
UDIBCQC308	D7udi_308	ATTGTGTT	D5udi_308	GAAGATTG
UDIBCQC309	D7udi_309	ATTGCTGA	D5udi_309	CTGAGCAC
UDIBCQC310	D7udi_310	TACATCCT	D5udi_310	ATGCGTTG
UDIBCQC311	D7udi_311	ATTCACGG	D5udi_311	GCCTACAC
UDIBCQC312	D7udi_312	TAATTGAC	D5udi_312	TATAGTTG
UDIBCQC313	D7udi_313	ATAGTCTG	D5udi_313	TGCAATGC
UDIBCQC314	D7udi_314	TATAAGAC	D5udi_314	CATGTAAG
UDIBCQC315	D7udi_315	ATTCTTAC	D5udi_315	CTATACAC
UDIBCQC316	D7udi_316	TAAGAAGG	D5udi_316	GAGTGATT
UDIBCQC317	D7udi_317	ATTCTCTA	D5udi_317	AGATAGTG
UDIBCQC318	D7udi_318	ATTCGATG	D5udi_318	GAGATCAC
UDIBCQC319	D7udi_319	TAAGCTAC	D5udi_319	ACGGATTG
UDIBCQC320	D7udi_320	ATTCGTGT	D5udi_320	TGACGAAC
UDIBCQC321	D7udi_321	ATGAATAT	D5udi_321	TTAAGTGG
UDIBCQC322	D7udi_322	ATGAAGGA	D5udi_322	CATTCAAC
UDIBCQC323	D7udi_323	ATGAACTG	D5udi_323	CTTGCTGG
UDIBCQC324	D7udi_324	ATGAGCAC	D5udi_324	GAACTAAC
UDIBCQC325	D7udi_325	ATAGGAAT	D5udi_325	TAGCCTGG
UDIBCQC326	D7udi_326	TAGACGGC	D5udi_326	AGCGGACC
UDIBCQC327	D7udi_327	GAATAGTG	D5udi_327	TGGAAGTG
UDIBCQC328	D7udi_328	ATGACACC	D5udi_328	AACTTAAC
UDIBCQC329	D7udi_329	ATGACGTT	D5udi_329	ACTAGATT
UDIBCQC330	D7udi_330	ATGTATTA	D5udi_330	TCATTAAC
UDIBCQC331	D7udi_331	ATGTACCT	D5udi_331	TAGGTATG
UDIBCQC332	D7udi_332	TCAATGGA	D5udi_332	ACTCATAC
UDIBCQC333	D7udi_333	ATGTTGAG	D5udi_333	TACGCAAG
UDIBCQC334	D7udi_334	TAACCAGA	D5udi_334	ATTCGGTC
UDIBCQC335	D7udi_335	ATGTGATT	D5udi_335	AAGTAACG
UDIBCQC336	D7udi_336	TAACAGCC	D5udi_336	GTCAGGTC
UDIBCQC337	D7udi_337	TATCTGTC	D5udi_337	ATGCCGAA
UDIBCQC338	D7udi_338	AGATAACT	D5udi_338	GCCTTCGG
UDIBCQC339	D7udi_339	ATGTGGCA	D5udi_339	TCATGGTC
UDIBCQC340	D7udi_340	TAACACTG	D5udi_340	TGCACGTC
UDIBCQC341	D7udi_341	ATGTCTGG	D5udi_341	TGTCGCCG
UDIBCQC342	D7udi_342	TCAAGCAC	D5udi_342	ACCTAGTC
UDIBCQC343	D7udi_343	ATGGTAAC	D5udi_343	GTCTACCG
UDIBCQC344	D7udi_344	ATGGTTCA	D5udi_344	AAGCTGTC
UDIBCQC345	D7udi_345	TCCAACGG	D5udi_345	TGCGAGCG
UDIBCQC346	D7udi_346	GAACAGAA	D5udi_346	ACTATCTC
UDIBCQC347	D7udi_347	ATGGCCAG	D5udi_347	GTAGTGTT
UDIBCQC348	D7udi_348	TCACGTGA	D5udi_348	CCGCACAC
UDIBCQC349	D7udi_349	ATACAACC	D5udi_349	CACACGGT
UDIBCQC350	D7udi_350	TATGTTGG	D5udi_350	TGTGTCCA
UDIBCQC351	D7udi_351	ATGCTAGA	D5udi_351	AAGTAGTT
UDIBCQC352	D7udi_352	ATGCTGTC	D5udi_352	TTCCTCAA
UDIBCQC353	D7udi_353	GATTGACC	D5udi_353	ATTAAGTT
UDIBCQC354	D7udi_354	ATCATACT	D5udi_354	TAAGTCAA
UDIBCQC355	D7udi_355	ATCAGCTA	D5udi_355	GGCAAGTT
UDIBCQC356	D7udi_356	ATCACGCA	D5udi_356	ACGTGCAC
UDIBCQC357	D7udi_357	GAGTTCTG	D5udi_357	CCGAAGTT
UDIBCQC358	D7udi_358	ATCACCGT	D5udi_358	TTCGTACA
UDIBCQC359	D7udi_359	TCTTGGAA	D5udi_359	GCTGAGTT
UDIBCQC360	D7udi_360	ATCTAATC	D5udi_360	AGAATACA
UDIBCQC361	D7udi_361	ATACATGA	D5udi_361	CCGACGAC
UDIBCQC362	D7udi_362	TATTGAAT	D5udi_362	TGCGTCGG
UDIBCQC363	D7udi_363	GCTAGTCT	D5udi_363	TCTTCGTT
UDIBCQC364	D7udi_364	ATCTAGCG	D5udi_364	ATCCGACA
UDIBCQC365	D7udi_365	TCTCGCTA	D5udi_365	CGGTCGTT
UDIBCQC366	D7udi_366	ATCTGAAG	D5udi_366	GCACGACA
UDIBCQC367	D7udi_367	TCTAATGC	D5udi_367	TTGACGTT
UDIBCQC368	D7udi_368	GATAGCGC	D5udi_368	ACCTTACA
UDIBCQC369	D7udi_369	TATAGTGT	D5udi_369	GATCCGTT
UDIBCQC370	D7udi_370	TATCAAGC	D5udi_370	CGATTCAA
UDIBCQC371	D7udi_371	ATCGCATT	D5udi_371	ACACCGTT
UDIBCQC372	D7udi_372	ATCCAGAA	D5udi_372	CACTGGTT
UDIBCQC373	D7udi_373	ATACTATT	D5udi_373	GTTATATT
UDIBCQC374	D7udi_374	GATGATAC	D5udi_374	CACGCGCC
UDIBCQC375	D7udi_375	GCGGTATT	D5udi_375	GGTAACAA
UDIBCQC376	D7udi_376	ATCCGTTC	D5udi_376	GCAAGGTT
UDIBCQC377	D7udi_377	AGAATTCA	D5udi_377	ATTGCACA
UDIBCQC378	D7udi_378	TATGACTT	D5udi_378	CCTCGGTT
UDIBCQC379	D7udi_379	GAGTCAGA	D5udi_379	GTATCCAA
UDIBCQC380	D7udi_380	AGAAGACG	D5udi_380	GTGCGGTT
UDIBCQC381	D7udi_381	AGAAGCTT	D5udi_381	CACTAACA
UDIBCQC382	D7udi_382	GAGTAGCA	D5udi_382	TACGAATA
UDIBCQC383	D7udi_383	AGAACCAA	D5udi_383	ACAATTAT
UDIBCQC384	D7udi_384	GCTTGGTG	D5udi_384	TTGGACTA

7 Technical Assistance

For help with any of our products, please contact Revvity Technical Support at +1 203-925-4602 (direct) or 800.762.4000 (toll-free, U.S. only) or email L3BioQule@Revvity.com, or fill out a Customer Support form on our website www.revvity.com/customersupport.

8 Revision History

Date	Revision	Notes
July 18th, 2024	B	Updated electropherograms
October 1st, 2024	C	Updated adapter dilution

Revvity
940 Winter Street
Waltham, MA, 02451 USA

(800) 762-4000
www.revvity.com