Assay Guide

BioQule™ Illumina™ DNA PCR-Free Prep Method

PN: PR-00003 Rev B
Publication Date: October 1st, 2024

Table of Contents

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

This guide explains how to prepare up to 384 uniquely dual-indexed paired-end single-stranded libraries from DNA using the Illumina DNA PCR-Free Library Prep workflow.

BioQule™ Illumina™ DNA PCR-Free Prep Features:

- Low input requirement for DNA down to 100 ng/sample.
- Complete library prep solution, including size selection beads and fluorescence measurements for quantifying libraries.
- Robust genome coverage and reliable performance with sequencing bias mitigation.
- Functionally tested with Illumina® sequencing platform.
- Uses innovative sample normalization at inputs ≥ 300 ng DNA.
- Streamlines sample pooling and sequencing.

Specifications:

Input Type:	DNA
Input Amount:	100 -299 ng
Number of Reactions:	8
Sample Indexes Available:	384
Sequencing Platforms:	Illumina NGS

1.2 Storage and Stability

- Store the Optics Standard and Pretreatment Buffer at -20°C upon arrival to laboratory.
- Store the 384-well Reagent Plate in a sterile and dry environment.

1.3 Product Use

- Purified genomic DNA is compatible with this kit.
- Do not use the pretreatment buffer and optics 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 manual. It is important to follow the latest protocol found 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™ while it is running.
- Do not heat Illumina™ Unique Dual Index Barcodes above room temperature.
- Do not freeze Illumina™ Purification Beads.
- Always vortex the beads to achieve a uniform suspension before pipetting.
- To enable multiplexing, please use the appropriate combination of Illumina™ Unique Dual Index Barcodes. Make sure the adapter plate is on the correct side. Always take note of adapters that you have used.
- DNA sample quality may vary between preparations. It is the user's responsibility to utilize high quality DNA. DNA that is heavily nicked or damaged may cause library preparation failure. DNA quantification should be done with fluorescence-based methods. These methods employ a dye specific to the DNA for accurate quantification of the double-stranded DNA (dsDNA). Absorbance measurements can be utilized, but presence of RNA and other contaminants may lead to overestimation of DNA. The user should be aware that contaminating RNA, nucleotides and single-stranded DNA may affect the amount of usable DNA in a sample preparation.

1.5 Prior to Starting

- Register your BioQule™ by sending an email to L3BioQule@revvity.com and get access to training videos, training material, community assay development and software updates.
- Ensure a laboratory temperature of 20 - 25 °C (68 - 77 °F).
- Identify all reagents and equipment needed during the run in the lab and refrigerators.

2 Contents

2.1 Kit Contents

The BioQule™ Illumina™ DNA PCR-Free Accessory Kit (P/N 900-000013) has the following components:

- 4 x BioQule™ Illumina™ DNA PCR-Free Accessory Plate (P/N 445-000056). Each plate comes with a 384 Deep-Well Plate, a plate map and a plate loading template insert.
- 4 x BioQule™ Optics Standard (P/N 820-000057).
- 8 x BioQule™ Optics Solution (P/N 820-000058.)
- 4 x Pretreatment Buffer (P/N 820-000056).

ⓘ This kit contains sufficient materials to prepare 32 DNA-Seq libraries.

2.2 Additional Equipment, Reagents and Labware

- Equipment
  - BioQule™ cartridge (Revvity, PN. CLS157064)
  - 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 Fluorometer (ThermoFisher Scientific) or other appropriate fluorometer and accessories for quantification of input DNA.
  - LabChip GXII Touch (Revvity, PN. CLS137032), or equivalent for electrophoretic analysis of nucleic acids.
- Reagents
  - Isopropyl Alcohol (IPA)
  - Nuclease Free Water
  - Illumina™ Unique Dual Index Barcodes (Illumina: PN. 20027213, 20027214, 20042666, 20042667)
  - Illumina™ DNA PCR-Free Prep Tagmentation Kit (Illumina: PN. 20041795, 96 reactions)
- Supplies and Labware
  - Filtered pipette tips, Nuclease Free
  - 0.2 ml PCR strip tubes
  - 10 ml centrifuge tubes

To Order:

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

3 Planning the Run

3.1 Workflow and Time Required

The Illumina™ DNA PCR-Free Prep Kit 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. Figure 1. demonstrates the difference between manual and automated library preparation workflows.

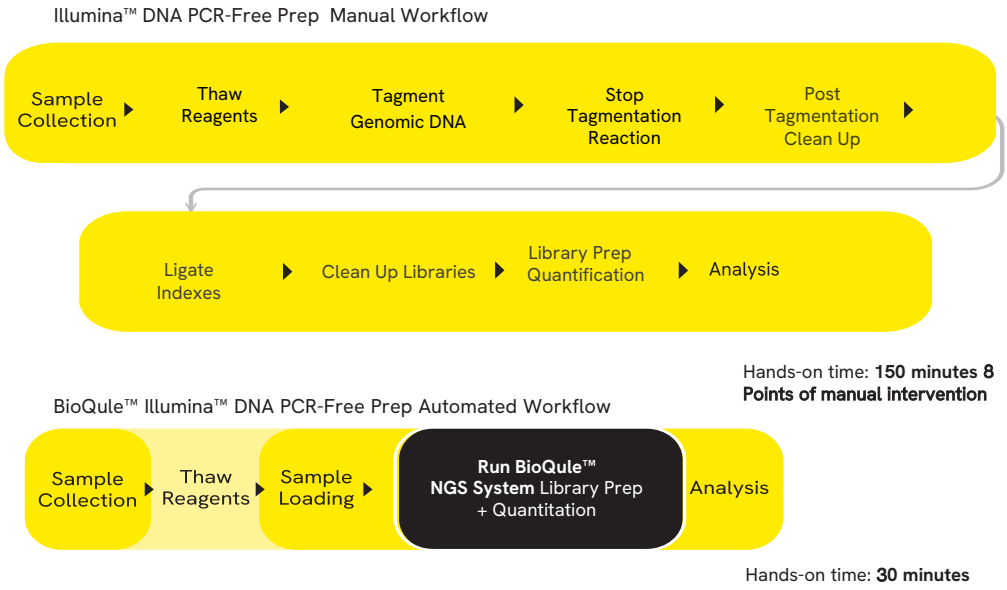

Figure 1. BioQule™ vs Manual Workflow of Illumina™ DNA PCR-Free Prep Assay

3.2 Input DNA Requirements

DNA Quantity

This kit is compatible with a total DNA input of between 100 ng to 299 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.

DNA Purity

DNA Samples must be free of organic solvents (such as phenol, and ethanol), salts used in DNA isolation procedures, any contaminating proteins, and other cellular material. If using a DNA isolation method based on organic solvents, such as TRIzol, we recommend a column purification after isolation.

One measure of DNA purity is the ratio of absorbance readings. The A260:A280 ratio for DNA samples should be in the range1.8-2.0. For a secondary indication of sample purity, use the ratio of absorbance at 260 nm to that at 230 nm. Target a 260/230 ratio of 2.0–2.2.

DNA Integrity

BioQule™ Library Prep will generate the best library when DNA samples of high molecular weight and low evidence of degradation are utilized. The BioQule™ has not been tested with degraded samples. DNA integrity can be determined by utilizing a LabChip GXII Touch or equivalent equipment.

3.3 Sequencing Recommendations and Guidelines

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

Index Read Recommendations

Illumina™ DNA PCR-Free Prep uses 10 base Unique Dual Indexes (UDI) for sample multiplexing. Both Index 1 (i7) and Index 2 (i5) should be sequenced. These indexes 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 Freezer 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 a run on the BioQule™. The plate map helps identify which wells will have volume added. The loading template insert confirms volumes added into each column.

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

a. Tagmentation Buffer 1 (TB1)
b. Illumina™ Index Adapters
c. BioQule™ Optics Standard
d. BioQule™ Optics Solution
e. BioQule™ Pretreatment Buffer

Step 2. Concurrently, remove the Bead-Linked Transposomes (BLT) from 4°C storage and thaw for 30 minutes.

Step 3. Prepare the following materials:

a. Prepare 4 ml of 70% isopropyl alcohol (IPA)
b. A new BioQule™ cartridge
c. 8 x 25 µl DNA samples in water. Ensure that the DNA concentration is at least 4 ng/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 4. Prepare Adapter mix for loading:

- Thaw and spin down the adapter plate for 10 seconds.
- Prepare 8 thin walled PCR tubes (one for each sample). Add 3 µl of Nuclease-Free water to each tube using a 10 µl pipette and tips. Add 5 µl of undiluted adapter to each well. Mix by pipette no more than 5 times. Briefly spin down the tubes to settle liquid stuck on the walls.
- Immediately put back the adapter plate into -20 °C after use.

Table 1: Adapter Mix Table

	1x (µl)
Adapter	5
Nuclease free Water	3
Total	8

Note: *Mix Slowly. Do not reuse barcodes and take note of barcodes that you have used. Prepare adapter mix separately. DO NOT pool different adapter barcodes.*

Step 5. Prepare Stop Tagment Buffer 2 (ST2) according to the table below:

Table 2: Stop Tagment Buffer 2 (ST2) Mix

	1x (µl)	8.8x (µl)
ST2	10	88
Nuclease free Water	3	26.4
Total	13	114.4

Note: *Vortex mixture thoroughly until homogeneous. If precipitates are observed, heat at 37 °C for 10 minutes, and then vortex until precipitates are dissolved.*

Step 6. Prepare Tagmentation Master Mix (8.8x) .

- Vortex the BLT-PF vigorously for 10 seconds to resuspend. Repeat as necessary.
- Vortex the TB1 for 10 seconds or mix thoroughly with a pipette.
- Prepare the Tagmentation mix (8.8x) according to the table below and pipette mix. DO NOT vortex.

Table 3: Tagmentation Master Mix

	1x (µl)
gDNA (4 ng/µl)	25
BLT-PF	15
TB1	10
Total	50

Note: The 25 µl of the gDNA should have a concentration of 4 ng/µl if an input of 100 ng gDNA is required. Adjust the concentration depending on the desired gDNA input amount of between 100 -299 ng. If input gDNA volume does not reach 25 ul add NFW to achieve the desired volume of 25 ul).

Step 7. Prepare the HP3.

- Vortex the HP3 vigorously for 10 seconds.
- Prepare the HP3 mix according to the table below:

Table 4: HP3 Mix

	1x (µl)	8.8x (µl)
HP3	6	52.8
Nuclease free Water	54	475.2
Total	60	528

Note: *Extra HP3 mix is prepared and 45 µl is added to destination well.*

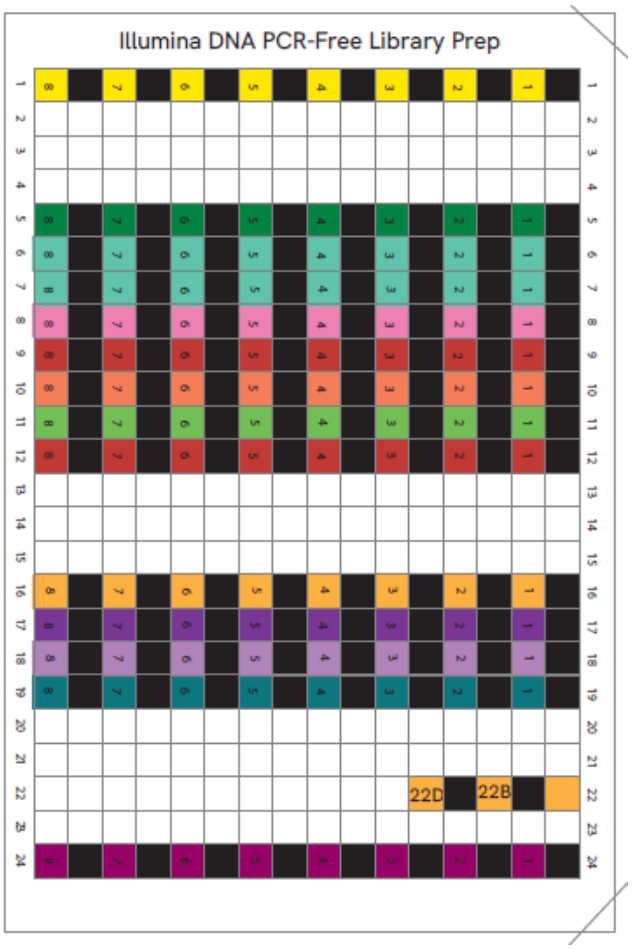

Figure 2. Illumina™ DNA PCR-Free Prep Loading Template Insert

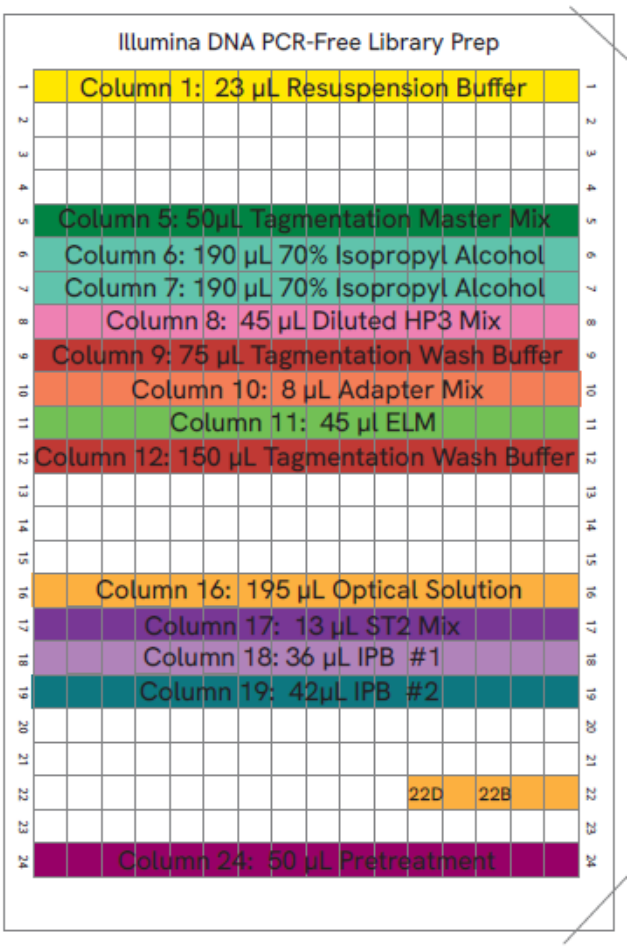

Figure 3. Illumina™ DNA PCR-Free Prep Plate Map

Step 8. Follow the plate loading template. Reagents should be loaded in wells marked on the plate map in the following order:
(Do not load the Isopropyl Alcohol until Step 10.)

a. Column 1 : Load 23 µl of RSB .
b. Column 5: Load 50 ul of the Tagmentation Mix (prepared in step 6), using each PCR tube for its respective sample well.
c. Columns 8: Load 45 ul of the diluted HP3 mix (prepared in step 7)
d. Column 9 : Vortex and load 75 µl of the TWB.
e. Column 12: Vortex and load 150 µl of the TWB.
f. Column 10: Load the 8 µl of the adapter mix prepared in Step 4.
g. Column 11: Load 45 µl of the ELM.
h. Column 17: Load 13 µl of the ST2 mix prepared in step 5.
i. Column 18: Vortex and load 36 µl of the IPB.
j. Column 19: Vortex and load 42 µl of the IPB.
k. Column 24: Load 50 µl of the pretreatment buffer.
l. Column 16: Add 195 µL of the Optics Solution.
m. Well 22B and Well 22D: Add 190 µl of the Optics Solution.
n. Well 22B: Add 10 µl of RSB and pipette mix slowly.
o. Well 22D: Add 10 µl of Optics Standard and pipette mix slowly.

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.*

Step 9. Cover the plate with a 384-well a 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. Load 190 µl of 70% IPA into columns 6 and 7. Take extreme care to not spill IPA into adjacent wells, and try not to leave droplets on the plate seal.

Note: *Do not invert or tilt the plate plate after loading the IPA.*

The Reagent Plate is now ready to run. It should look like Figure 4.

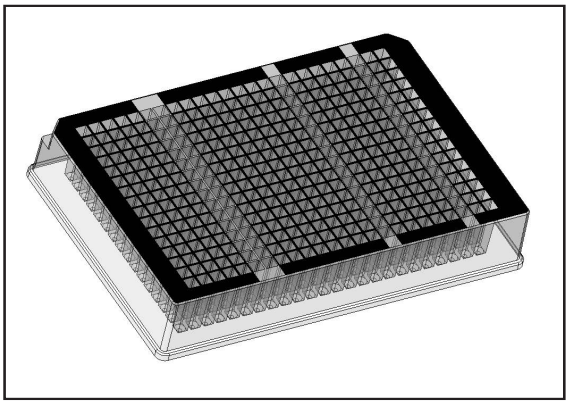

Figure 4. Removing the plate seal from the plate

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, connect the two machines 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 to ensure the correct one is selected. Press Connect to Device to continue.

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

Step 4. Insert the Reagent plate onto the BioQule™ Plate, as shown in Figure 5.

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 blunt vertex of the 384 well plate should be oriented to the top left.

b. Press the plate to the left to depress the flat spring on the left side of the x-plate, and then back to depress the flat spring on the back of the x-plate.

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

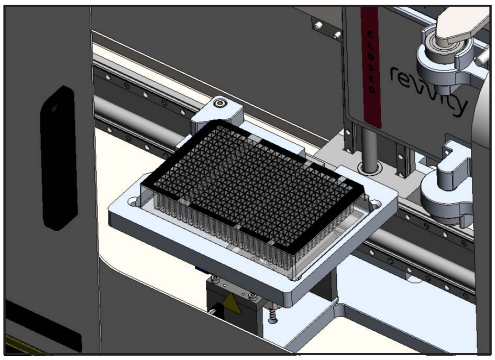

Figure 5. Placing Reagent Plate onto the X-plate

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

a. Begin by removing the PCR door from the instrument.
b. Hold the cartridge with 2 hands with the cannula array in your left, and the tubing scaffold in your right. Make sure the barcode on the tubing scaffold is facing you.
c. Push the cannula array into the holder. There is an arrow on the pull-tab indication 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.

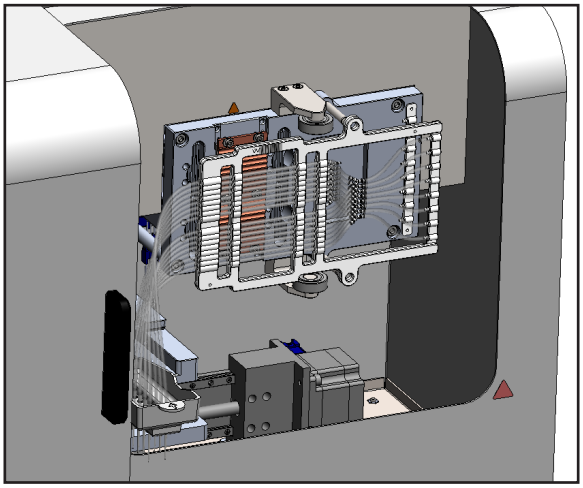

Figure 6. Cartridge insertion into BioQule™

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. Press Enter to confirm Barcodes and then press Next.

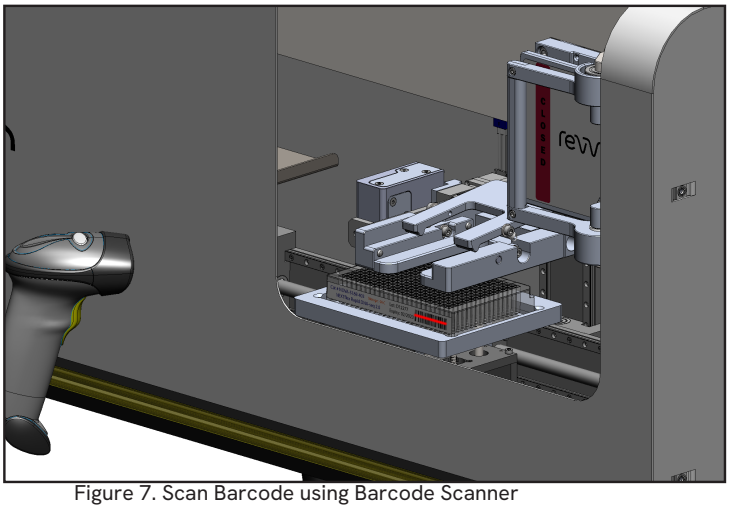

Figure 7. Scan Barcode using Barcode Scanner

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.

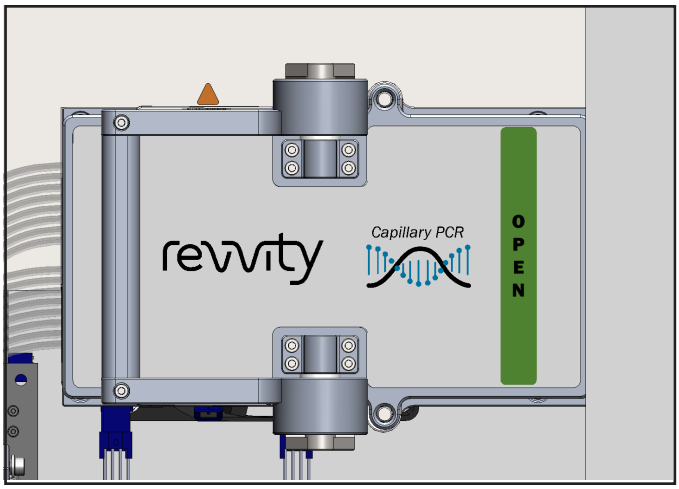

Figure 8. PCR Door Placement

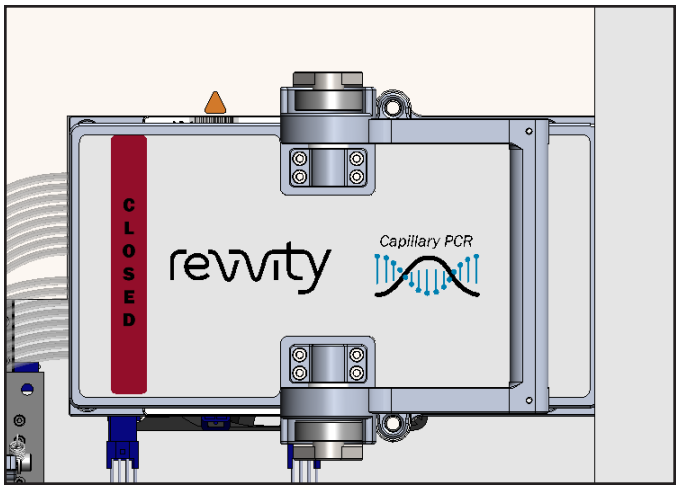

Figure 9. PCR Door Shut

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 will be ready and can be found in column 1.

Step 10. Spin down the reagent plate

Note: Libraries can be stored in the plate at room temperature for 24 hours. It is recommended to move the libraries to -20 °C as soon as reasonably possible but within 24 hours after completion of the protocol. Samples can be stored at -25 °C to -15 °C for up to 30 days

It is recommended to perform quality checks using a LabChip™ GX Nucleic Acid Analyzer prior to sequencing. Assess the quality of the library or pooled libraries using the following method.

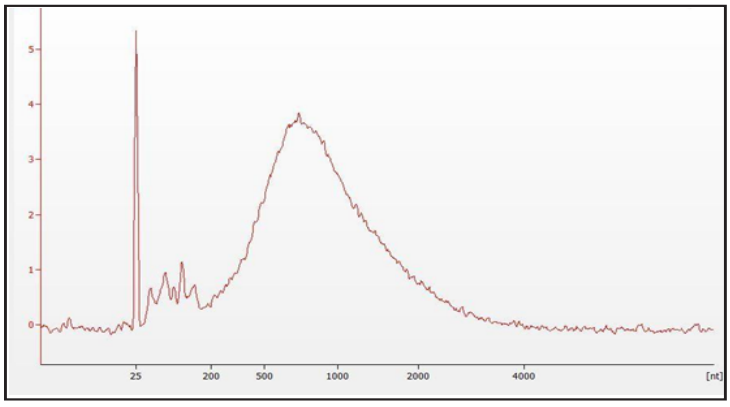

Figure 10. Example PCR-Free Electropherogram Plot

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

5 Troubleshooting

See Training Videos for explanations of any troubleshooting queries.

5.1 Low Volume of Library Generated

Possible causes include:

- Evaporation. Please only leave the plate in the instrument for up to 24 hours. Check the humidity (desire range is 30-50%) and temperature (20 - 25C) of the lab. The instrument should be far from any devices that vent hot air 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.

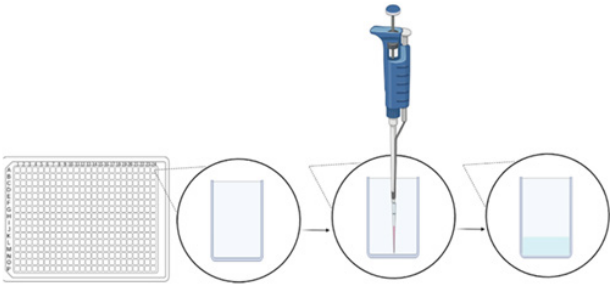

Figure 11. Pipetting directly at bottom of wells

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

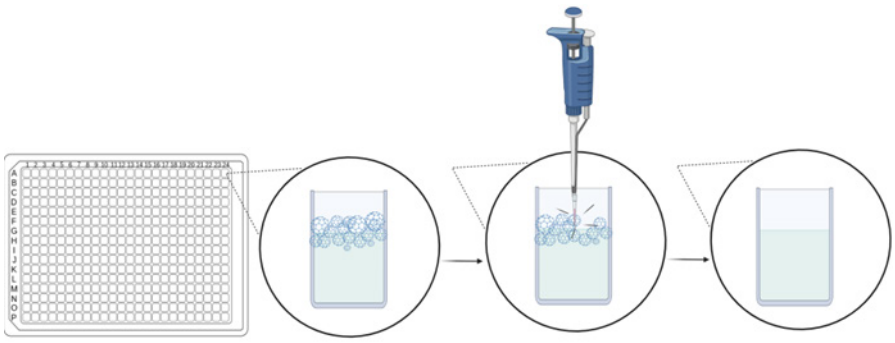

Figure 12. Popping bubbles using a 10 µl pipette tip

- BioQule™ motor stages may have skewed. Please contact L3BioQule@revvity.com.

5.2 Low Yield Library Generated

Possible causes 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 pressing 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 depress the pipette.

5.3 High Adapter Dimer

Possible causes include:

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

5.4 Library Quantification with other methods

If an alternative is needed, assess the quality of 1µl library or pooled libraries using one of the following methods.

Note: Illumina™ DNA PCR-Free Library Prep libraries are single-stranded DNA.

KAPA qPCR library quantification kit - 100-299 ng DNA Inputs

For DNA inputs 100-299 ng, quantify the library before pooling.

1. Analyze 2 µl of each library using the KAPA qPCR library quantification kit.
2. Use 450 bp as the library length.
3. In a 1.5 or 1.7 ml microcentrifuge tube, combine libraries equimolarly as follows.
   - Combine libraries equimolarly to between 1–1.5nM final concentration.
   - Vortex to mix, and then centrifuge at 280 x g for 1 minute.
4. Proceed immediately to Dilute Libraries to the Starting Concentration and Sequence.

Qubit method for DNA concentration

Calculate the molarity value of the pooled libraries using the formula below. The formula uses 450 bp as the average library size and 660 g/mol as the DNA mass. This equation will output the double-stranded DNA equivalent.

$$Molarity\ (nM) = Yield\left(\frac{ng}{\mu g}\right) \times 3.36$$

Sequencing System	KAPA qPCR Quantification		Qubit ssDNA Quantification	
	Starting Concentration (nM)	Final Loading Concentration (pM)	Starting Concentration (nM)	Final Loading Concentration (pM)
NovaSeq 6000 standard workflow	1–1.5	200–300	2–3	400–600
NovaSeq 6000 Xp workflow	0.75–1	150–200	1.5–2	300–400

6 Appendix

6.1 Index (UDI) Sequences

Index or Barcode Sequences to be used on Illumina™ DNA Prep kits are given below. The actual adapter sequence and what goes onto the sequencing sample sheet is different. The I5 index on the Sample Sheet also differs based on which Sequencer is being used. Use Column 5 if using a NovaSeq 6000 with v1.0 reagent kits, NovaSeq X Series, MiniSeq with Rapid reagents, MiSeq, HiSeq 2000/2500, NextSeq 1000/2000. Use Column 6 if using a iSeq, NovaSeq 6000 with v1.5 reagent kits, MiniSeq, NextSeq 500/550, HiSeq 3000/4000/X, NextSeq 1000/2000.

Table 5: Illumina™ UDI Sequences Kit A

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)	Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0001	CGCTCAGTTC	GAACTGAGCG	TCGTGGAGCG	TCGTGGAGCG	CGCTCCACGA	UDP0036	TACGGCCGGT	ACCGGCCGTA	TGGCAATATT	TGGCAATATT	AATATTGCCA
UDP0002	TATCTGACCT	AGGTCAGATA	CTACAAGATA	CTACAAGATA	TATCTTGTAG	UDP0037	GTCGATTACA	TGTAATCGAC	GATCACCGCG	GATCACCGCG	CGCGGTGATC
UDP0003	ATATGAGACG	CGTCTCATAT	TATAGTAGCT	TATAGTAGCT	AGCTACTATA	UDP0038	CTGTCTGCAC	GTGCAGACAG	TACCATCCGT	TACCATCCGT	ACGGATGGTA
UDP0004	CTTATGGAAT	ATTCCATAAG	TGCCTGGTGG	TGCCTGGTGG	CCACCAGGCA	UDP0039	CAGCCGATTG	CAATCGGCTG	GCTGTAGGAA	GCTGTAGGAA	TTCCTACAGC
UDP0005	TAATCTCGTC	GACGAGATTA	ACATTATCCT	ACATTATCCT	AGGATAATGT	UDP0040	TGACTACATA	TATGTAGTCA	CGCACTAATG	CGCACTAATG	CATTAGTGCG
UDP0006	GCGCGATGTT	AACATCGCGC	GTCCACTTGT	GTCCACTTGT	ACAAGTGGAC	UDP0041	ATTGCCGAGT	ACTCGGCAAT	GACAACTGAA	GACAACTGAA	TTCAGTTGTC
UDP0007	AGAGCACTAG	CTAGTGCTCT	TGGAACAGTA	TGGAACAGTA	TACTGTTCCA	UDP0042	GCCATTAGAC	GTCTAATGGC	AGTGGTCAGG	AGTGGTCAGG	CCTGACCACT
UDP0008	TGCCTTGATC	GATCAAGGCA	CCTTGTTAAT	CCTTGTTAAT	ATTAACAAGG	UDP0043	GGCGAGATGG	CCATCTCGCC	TTCTATGGTT	TTCTATGGTT	AACCATAGAA
UDP0009	CTACTCAGTC	GACTGAGTAG	GTTGATAGTG	GTTGATAGTG	CACTATCAAC	UDP0044	TGGCTCGCAG	CTGCGAGCCA	AATCCGGCCA	AATCCGGCCA	TGGCCGGATT
UDP0010	TCGTCTGACT	AGTCAGACGA	ACCAGCGACA	ACCAGCGACA	TGTCGCTGGT	UDP0045	TAGAATAACG	CGTTATTCTA	CCATAAGGTT	CCATAAGGTT	AACCTTATGG
UDP0011	GAACATACGG	CCGTATGTTC	CATACACTGT	CATACACTGT	ACAGTGTATG	UDP0046	TAATGGATCT	AGATCCATTA	ATCTCTACCA	ATCTCTACCA	TGGTAGAGAT
UDP0012	CCTATGACTC	GAGTCATAGG	GTGTGGCGCT	GTGTGGCGCT	AGCGCCACAC	UDP0047	TATCCAGGAC	GTCCTGGATA	CGGTGGCGAA	CGGTGGCGAA	TTCGCCACCG
UDP0013	TAATGGCAAG	CTTGCCATTA	ATCACGAAGG	ATCACGAAGG	CCTTCGTGAT	UDP0048	AGTGCCACTG	CAGTGGCACT	TAACAATAGG	TAACAATAGG	CCTATTGTTA
UDP0014	GTGCCGCTTC	GAAGCGGCAC	CGGCTCTACT	CGGCTCTACT	AGTAGAGCCG	UDP0049	GTGCAACACT	AGTGTTGCAC	CTGGTACACG	CTGGTACACG	CGTGTACCAG
UDP0015	CGGCAATGGA	TCCATTGCCG	GAATGCACGA	GAATGCACGA	TCGTGCATTC	UDP0050	ACATGGTGTC	GACACCATGT	TCAACGTGTA	TCAACGTGTA	TACACGTTGA
UDP0016	GCCGTAACCG	CGGTTACGGC	AAGACTATAG	AAGACTATAG	CTATAGTCTT	UDP0051	GACAGACAGG	CCTGTCTGTC	ACTGTTGTGA	ACTGTTGTGA	TCACAACAGT
UDP0017	AACCATTCTC	GAGAATGGTT	TCGGCAGCAA	TCGGCAGCAA	TTGCTGCCGA	UDP0052	TCTTACATCA	TGATGTAAGA	GTGCGTCCTT	GTGCGTCCTT	AAGGACGCAC
UDP0018	GGTTGCCTCT	AGAGGCAACC	CTAATGATGG	CTAATGATGG	CCATCATTAG	UDP0053	TTACAATTCC	GGAATTGTAA	AGCACATCCT	AGCACATCCT	AGGATGTGCT
UDP0019	CTAATGATGG	CCATCATTAG	GGTTGCCTCT	GGTTGCCTCT	AGAGGCAACC	UDP0054	AAGCTTATGC	GCATAAGCTT	TTCCGTCGCA	TTCCGTCGCA	TGCGACGGAA
UDP0020	TCGGCCTATC	GATAGGCCGA	CGCACATGGC	CGCACATGGC	GCCATGTGCG	UDP0055	TATTCCTCAG	CTGAGGAATA	CTTAACCACT	CTTAACCACT	AGTGGTTAAG
UDP0021	AGTCAACCAT	ATGGTTGACT	GGCCTGTCCT	GGCCTGTCCT	AGGACAGGCC	UDP0056	CTCGTGCGTT	AACGCACGAG	GCCTCGGATA	GCCTCGGATA	TATCCGAGGC
UDP0022	GAGCGCAATA	TATTGCGCTC	CTGTGTTAGG	CTGTGTTAGG	CCTAACACAG	UDP0057	TTAGGATAGA	TCTATCCTAA	CGTCGACTGG	CGTCGACTGG	CCAGTCGACG
UDP0023	AACAAGGCGT	ACGCCTTGTT	TAAGGAACGT	TAAGGAACGT	ACGTTCCTTA	UDP0058	CCGAAGCGAG	CTCGCTTCGG	TACTAGTCAA	TACTAGTCAA	TTGACTAGTA
UDP0024	GTATGTAGAA	TTCTACATAC	CTAACTGTAA	CTAACTGTAA	TTACAGTTAG	UDP0059	GGACCAACAG	CTGTTGGTCC	ATAGACCGTT	ATAGACCGTT	AACGGTCTAT
UDP0025	TTCTATGGTT	AACCATAGAA	GGCGAGATGG	GGCGAGATGG	CCATCTCGCC	UDP0060	TTCCAGGTAA	TTACCTGGAA	ACAGTTCCAG	ACAGTTCCAG	CTGGAACTGT
UDP0026	CCTCGCAACC	GGTTGCGAGG	AATAGAGCAA	AATAGAGCAA	TTGCTCTATT	UDP0061	TGATTAGCCA	TGGCTAATCA	AGGCATGTAG	AGGCATGTAG	CTACATGCCT
UDP0027	TGGATGCTTA	TAAGCATCCA	TCAATCCATT	TCAATCCATT	AATGGATTGA	UDP0062	TAACAGTGTT	AACACTGTTA	GCAAGTCTCA	GCAAGTCTCA	TGAGACTTGC
UDP0028	ATGTCGTGGT	ACCACGACAT	TCGTATGCGG	TCGTATGCGG	CCGCATACGA	UDP0063	ACCGCGCAAT	ATTGCGCGGT	TTGGCTCCGC	TTGGCTCCGC	GCGGAGCCAA
UDP0029	AGAGTGCGGC	GCCGCACTCT	TCCGACCTCG	TCCGACCTCG	CGAGGTCGGA	UDP0064	GTTCGCGCCA	TGGCGCGAAC	AACTGATACT	AACTGATACT	AGTATCAGTT
UDP0030	TGCCTGGTGG	CCACCAGGCA	CTTATGGAAT	CTTATGGAAT	ATTCCATAAG	UDP0065	AGACACATTA	TAATGTGTCT	GTAAGGCATA	GTAAGGCATA	TATGCCTTAC
UDP0031	TGCGTGTCAC	GTGACACGCA	GCTTACGGAC	GCTTACGGAC	GTCCGTAAGC	UDP0066	GCGTTGGTAT	ATACCAACGC	AATTGCTGCG	AATTGCTGCG	CGCAGCAATT
UDP0032	CATACACTGT	ACAGTGTATG	GAACATACGG	GAACATACGG	CCGTATGTTC	UDP0067	AGCACATCCT	AGGATGTGCT	TTACAATTCC	TTACAATTCC	GGAATTGTAA
UDP0033	CGTATAATCA	TGATTATACG	GTCGATTACA	GTCGATTACA	TGTAATCGAC	UDP0068	TTGTTCCGTG	CACGGAACAA	AACCTAGCAC	AACCTAGCAC	GTGCTAGGTT
UDP0034	TACGCGGCTG	CAGCCGCGTA	ACTAGCCGTG	ACTAGCCGTG	CACGGCTAGT	UDP0069	AAGTACTCCA	TGGAGTACTT	TCTGTGTGGA	TCTGTGTGGA	TCCACACAGA
UDP0035	GCGAGTTACC	GGTAACTCGC	AAGTTGGTGA	AAGTTGGTGA	TCACCAACTT	UDP0070	ACGTCAATAC	GTATTGACGT	GGAATTCCAA	GGAATTCCAA	TTGGAATTCC

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0074	ACCTTATGAA	TTCATAAGGT	TGTTAGAAGG	TGTTAGAAGG	CCTTCTAACA
UDP0075	CGCTGCAGAG	CTCTGCAGCG	GATGGATGTA	GATGGATGTA	TACATCCATC
UDP0076	GTAGAGTCAG	CTGACTCTAC	ACGGCCGTCA	ACGGCCGTCA	TGACGGCCGT
UDP0077	GGATACCAGA	TCTGGTATCC	CGTTGCTTAC	CGTTGCTTAC	GTAAGCAACG
UDP0078	CGCACTAATG	CATTAGTGCG	TGACTACATA	TGACTACATA	TATGTAGTCA
UDP0079	TCCTGACCGT	ACGGTCAGGA	CGGCCTCGTT	CGGCCTCGTT	AACGAGGCCG
UDP0080	CTGGCTTGCC	GGCAAGCCAG	CAAGCATCCG	CAAGCATCCG	CGGATGCTTG
UDP0081	ACCAGCGACA	TGTCGCTGGT	TCGTCTGACT	TCGTCTGACT	AGTCAGACGA
UDP0082	TTGTAACGGT	ACCGTTACAA	CTCATAGCGA	CTCATAGCGA	TCGCTATGAG
UDP0083	GTAAGGCATA	TATGCCTTAC	AGACACATTA	AGACACATTA	TAATGTGTCT
UDP0084	GTCCACTTGT	ACAAGTGGAC	GCGCGATGTT	GCGCGATGTT	AACATCGCGC
UDP0085	TTAGGTACCA	TGGTACCTAA	CATGAGTACT	CATGAGTACT	AGTACTCATG
UDP0086	GGAATTCCAA	TTGGAATTCC	ACGTCAATAC	ACGTCAATAC	GTATTGACGT
UDP0087	CATGTAGAGG	CCTCTACATG	GATACCTCCT	GATACCTCCT	AGGAGGTATC
UDP0088	TACACGCTCC	GGAGCGTGTA	ATCCGTAAGT	ATCCGTAAGT	ACTTACGGAT
UDP0089	GCTTACGGAC	GTCCGTAAGC	CGTGTATCTT	CGTGTATCTT	AAGATACACG
UDP0090	CGCTTGAAGT	ACTTCAAGCG	GAACCATGAA	GAACCATGAA	TTCATGGTTC
UDP0091	CGCCTTCTGA	TCAGAAGGCG	GGCCATCATA	GGCCATCATA	TATGATGGCC
UDP0092	ATACCAACGC	GCGTTGGTAT	ACATACTTCC	ACATACTTCC	GGAAGTATGT
UDP0093	CTGGATATGT	ACATATCCAG	TATGTGCAAT	TATGTGCAAT	ATTGCACATA
UDP0094	CAATCTATGA	TCATAGATTG	GATTAAGGTG	GATTAAGGTG	CACCTTAATC
UDP0095	GGTGGAATAC	GTATTCCACC	ATGTAGACAA	ATGTAGACAA	TTGTCTACAT
UDP0096	TGGACGGAGG	CCTCCGTCCA	CACATCGGTG	CACATCGGTG	CACCGATGTG

Table 6: Illumina™ UDI Sequences Kit B

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0097	CTGACCGGCA	TGCCGGTCAG	CCTGATACAA	CCTGATACAA	TTGTATCAGG
UDP0098	GAATTGAGTG	CACTCAATTC	TTAAGTTGTG	TTAAGTTGTG	CACAACTTAA
UDP0099	GCGTGTGAGA	TCTCACACGC	CGGACAGTGA	CGGACAGTGA	TCACTGTCCG
UDP0100	TCTCCATTGA	TCAATGGAGA	GCACTACAAC	GCACTACAAC	GTTGTAGTGC
UDP0101	ACATGCATAT	ATATGCATGT	TGGTGCCTGG	TGGTGCCTGG	CCAGGCACCA
UDP0102	CAGGCGCCAT	ATGGCGCCTG	TCCACGGCCT	TCCACGGCCT	AGGCCGTGGA
UDP0103	ACATAACGGA	TCCGTTATGT	TTGTAGTGTA	TTGTAGTGTA	TACACTACAA
UDP0104	TTAATAGACC	GGTCTATTAA	CCACGACACG	CCACGACACG	CGTGTCGTGG
UDP0105	ACGATTGCTG	CAGCAATCGT	TGTGATGTAT	TGTGATGTAT	ATACATCACA
UDP0106	TTCTACAGAA	TTCTGTAGAA	GAGCGCAATA	GAGCGCAATA	TATTGCGCTC
UDP0107	TATTGCGTTC	GAACGCAATA	ATCTTACTGT	ATCTTACTGT	ACAGTAAGAT
UDP0108	CATGAGTACT	AGTACTCATG	ATGTCGTGGT	ATGTCGTGGT	ACCACGACAT
UDP0109	TAATTCTACC	GGTAGAATTA	GTAGCCATCA	GTAGCCATCA	TGATGGCTAC
UDP0110	ACGCTAATTA	TAATTAGCGT	TGGTTAAGAA	TGGTTAAGAA	TTCTTAACCA
UDP0111	CCTTGTTAAT	ATTAACAAGG	TGTTGTTCGT	TGTTGTTCGT	ACGAACAACA
UDP0112	GTAGCCATCA	TGATGGCTAC	CCAACAACAT	CCAACAACAT	ATGTTGTTGG
UDP0113	CTTGTAATTC	GAATTACAAG	ACCGGCTCAG	ACCGGCTCAG	CTGAGCCGGT
UDP0114	TCCAATTCTA	TAGAATTGGA	GTTAATCTGA	GTTAATCTGA	TCAGATTAAC
UDP0115	AGAGCTGCCT	AGGCAGCTCT	CGGCTAACGT	CGGCTAACGT	ACGTTAGCCG
UDP0116	CTTCGCCGAT	ATCGGCGAAG	TCCAAGAATT	TCCAAGAATT	AATTCTTGGA
UDP0117	TCGGTCACGG	CCGTGACCGA	CCGAACGTTG	CCGAACGTTG	CAACGTTCGG
UDP0118	GAACAAGTAT	ATACTTGTTC	TAACCGCCGA	TAACCGCCGA	TCGGCGGTTA
UDP0119	AATTGGCGGA	TCCGCCAATT	CTCCGTGCTG	CTCCGTGCTG	CAGCACGGAG
UDP0120	GGCCTGTCCT	AGGACAGGCC	CATTCCAGCT	CATTCCAGCT	AGCTGGAATG
UDP0121	TAGGTTCTCT	AGAGAACCTA	GGTTATGCTA	GGTTATGCTA	TAGCATAACC
UDP0122	ACACAATATC	GATATTGTGT	ACCACACGGT	ACCACACGGT	ACCGTGTGGT
UDP0123	TTCCTGTACG	CGTACAGGAA	TAGGTTCTCT	TAGGTTCTCT	AGAGAACCTA
UDP0124	GGTAACGCAG	CTGCGTTACC	TATGGCTCGA	TATGGCTCGA	TCGAGCCATA
UDP0125	TCCACGGCCT	AGGCCGTGGA	CTCGTGCGTT	CTCGTGCGTT	AACGCACGAG
UDP0126	GATACCTCCT	AGGAGGTATC	CCAGTTGGCA	CCAGTTGGCA	TGCCAACTGG
UDP0127	CAACGTCAGC	GCTGACGTTG	TGTTCGCATT	TGTTCGCATT	AATGCGAACA
UDP0128	CGGTTATTAG	CTAATAACCG	AACCGCATCG	AACCGCATCG	CGATGCGGTT
UDP0129	CGCGCCTAGA	TCTAGGCGCG	CGAAGGTTAA	CGAAGGTTAA	TTAACCTTCG
UDP0130	TCTTGGCTAT	ATAGCCAAGA	AGTGCCACTG	AGTGCCACTG	CAGTGGCACT
UDP0131	TCACACCGAA	TTCGGTGTGA	GAACAAGTAT	GAACAAGTAT	ATACTTGTTC
UDP0132	AACGTTACAT	ATGTAACGTT	ACGATTGCTG	ACGATTGCTG	CAGCAATCGT
UDP0133	CGGCCTCGTT	AACGAGGCCG	ATACCTGGAT	ATACCTGGAT	ATCCAGGTAT
UDP0134	CATAACACCA	TGGTGTTATG	TCCAATTCTA	TCCAATTCTA	TAGAATTGGA
UDP0135	ACAGAGGCCA	TGGCCTCTGT	TGAGACAGCG	TGAGACAGCG	CGCTGTCTCA
UDP0136	TGGTGCCTGG	CCAGGCACCA	ACGCTAATTA	ACGCTAATTA	TAATTAGCGT
UDP0137	TAGGAACCGG	CCGGTTCCTA	TATATTCGAG	TATATTCGAG	CTCGAATATA
UDP0138	AATATTGGCC	GGCCAATATT	CGGTCCGATA	CGGTCCGATA	TATCGGACCG
UDP0139	ATAGGTATTC	GAATACCTAT	ACAATAGAGT	ACAATAGAGT	ACTCTATTGT
UDP0140	CCTTCACGTA	TACGTGAAGG	CGGTTATTAG	CGGTTATTAG	CTAATAACCG
UDP0141	GGCCAATAAG	CTTATTGGCC	GATAACAAGT	GATAACAAGT	ACTTGTTATC
UDP0142	CAGTAGTTGT	ACAACTACTG	AGTTATCACA	AGTTATCACA	TGTGATAACT
UDP0143	TTCATCCAAC	GTTGGATGAA	TTCCAGGTAA	TTCCAGGTAA	TTACCTGGAA
UDP0144	CAATTGGATT	AATCCAATTG	CATGTAGAGG	CATGTAGAGG	CCTCTACATG

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0145	GGCCATCATA	TATGATGGCC	GATTGTCATA	GATTGTCATA	TATGACAATC
UDP0146	AATTGCTGCG	CGCAGCAATT	ATTCCGCTAT	ATTCCGCTAT	ATAGCGGAAT
UDP0147	TAAGGAACGT	ACGTTCCTTA	GACCGCTGTG	GACCGCTGTG	CACAGCGGTC
UDP0148	CTATACGCGG	CCGCGTATAG	TAGGAACCGG	TAGGAACCGG	CCGGTTCCTA
UDP0149	ATTCAGAATC	GATTCTGAAT	AGCGGTGGAC	AGCGGTGGAC	GTCCACCGCT
UDP0150	GTATTCTCTA	TAGAGAATAC	TATAGATTCG	TATAGATTCG	CGAATCTATA
UDP0151	CCTGATACAA	TTGTATCAGG	ACAGAGGCCA	ACAGAGGCCA	TGGCCTCTGT
UDP0152	GACCGCTGTG	CACAGCGGTC	ATTCCTATTG	ATTCCTATTG	CAATAGGAAT
UDP0153	TTCAGCGTGG	CCACGCTGAA	TATTCCTCAG	TATTCCTCAG	CTGAGGAATA
UDP0154	AACTCCGAAC	GTTCGGAGTT	CGCCTTCTGA	CGCCTTCTGA	TCAGAAGGCG
UDP0155	ATTCCGCTAT	ATAGCGGAAT	GCGCAGAGTA	GCGCAGAGTA	TACTCTGCGC
UDP0156	TGAATATTGC	GCAATATTCA	GGCGCCAATT	GGCGCCAATT	AATTGGCGCC
UDP0157	CGCAATCTAG	CTAGATTGCG	AGATATGGCG	AGATATGGCG	CGCCATATCT
UDP0158	AACCGCATCG	CGATGCGGTT	CCTGCTTGGT	CCTGCTTGGT	ACCAAGCAGG
UDP0159	CTAGTCCGGA	TCCGGACTAG	GACGAACAAT	GACGAACAAT	ATTGTTCGTC
UDP0160	GCTCCGTCAC	GTGACGGAGC	TGGCGGTCCA	TGGCGGTCCA	TGGACCGCCA
UDP0161	AGATGGAATT	AATTCCATCT	CTTCAGTTAC	CTTCAGTTAC	GTAACTGAAG
UDP0162	ACACCGTTAA	TTAACGGTGT	TCCTGACCGT	TCCTGACCGT	ACGGTCAGGA
UDP0163	GATAACAAGT	ACTTGTTATC	CGCGCCTAGA	CGCGCCTAGA	TCTAGGCGCG
UDP0164	CTGGTACACG	CGTGTACCAG	AGGATAAGTT	AGGATAAGTT	AACTTATCCT
UDP0165	CGAAGGTTAA	TTAACCTTCG	AGGCCAGACA	AGGCCAGACA	TGTCTGGCCT
UDP0166	ATCGCATATG	CATATGCGAT	CCTTGAACGG	CCTTGAACGG	CCGTTCAAGG
UDP0167	ATCATAGGCT	AGCCTATGAT	CACCACCTAC	CACCACCTAC	GTAGGTGGTG
UDP0168	GATTGTCATA	TATGACAATC	TTGCTTGTAT	TTGCTTGTAT	ATACAAGCAA
UDP0169	CCAACAACAT	ATGTTGTTGG	CAATCTATGA	CAATCTATGA	TCATAGATTG
UDP0170	TTGGTGGTGC	GCACCACCAA	TGGTACTGAT	TGGTACTGAT	ATCAGTACCA
UDP0171	GCGAACGCCT	AGGCGTTCGC	TTCATCCAAC	TTCATCCAAC	GTTGGATGAA
UDP0172	CAACCGGAGG	CCTCCGGTTG	CATAACACCA	CATAACACCA	TGGTGTTATG
UDP0173	AGCGGTGGAC	GTCCACCGCT	TCCTATTAGC	TCCTATTAGC	GCTAATAGGA
UDP0174	GACGAACAAT	ATTGTTCGTC	TCTCTAGATT	TCTCTAGATT	AATCTAGAGA
UDP0175	CCACTGGTCC	GGACCAGTGG	CGCGAGCCTA	CGCGAGCCTA	TAGGCTCGCG
UDP0176	TGTTAGAAGG	CCTTCTAACA	GATAAGCTCT	GATAAGCTCT	AGAGCTTATC
UDP0177	TATATTCGAG	CTCGAATATA	GAGATGTCGA	GAGATGTCGA	TCGACATCTC
UDP0178	CGCGACGATC	GATCGTCGCG	CTGGATATGT	CTGGATATGT	ACATATCCAG
UDP0179	GCCTCGGATA	TATCCGAGGC	GGCCAATAAG	GGCCAATAAG	CTTATTGGCC
UDP0180	TGAGACAGCG	CGCTGTCTCA	ATTACTCACC	ATTACTCACC	GGTGAGTAAT
UDP0181	TGTTCGCATT	AATGCGAACA	AATTGGCGGA	AATTGGCGGA	TCCGCCAATT
UDP0182	TCCAAGAATT	AATTCTTGGA	TTGTCAACTT	TTGTCAACTT	AAGTTGACAA
UDP0183	GCTGTAGGAA	TTCCTACAGC	GGCGAATTCT	GGCGAATTCT	AGAATTCGCC
UDP0184	ATACCTGGAT	ATCCAGGTAT	CAACGTCAGC	CAACGTCAGC	GCTGACGTTG
UDP0185	GTTGGACCGT	ACGGTCCAAC	TCTTACATCA	TCTTACATCA	TGATGTAAGA
UDP0186	ACCAAGTTAC	GTAACTTGGT	CGCCATACCT	CGCCATACCT	AGGTATGGCG
UDP0187	GTGTGGCGCT	AGCGCCACAC	CTAATGTCTT	CTAATGTCTT	AAGACATTAG
UDP0188	GGCAGTAGCA	TGCTACTGCC	CAACCGGAGG	CAACCGGAGG	CCTCCGGTTG
UDP0189	TGCGGTGTTG	CAACACCGCA	GGCAGTAGCA	GGCAGTAGCA	TGCTACTGCC
UDP0190	GATTAAGGTG	CACCTTAATC	TTAGGATAGA	TTAGGATAGA	TCTATCCTAA
UDP0191	CAACATTCAA	TTGAATGTTG	CGCAATCTAG	CGCAATCTAG	CTAGATTGCG
UDP0192	GTGTTACCGG	CCGGTAACAC	GAGTTGTACT	GAGTTGTACT	AGTACAACTC

Table 7: Illumina™ UDI Sequences Kit C

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0193	TATCATGAGA	TCTCATGATA	AACACGTGGA	AACACGTGGA	TCCACGTGTT
UDP0194	CTTGGCCTCG	CGAGGCCAAG	GTGTTACCGG	GTGTTACCGG	CCGGTAACAC
UDP0195	GTCTCGTGAA	TTCACGAGAC	AGATTGTTAC	AGATTGTTAC	GTAACAATCT
UDP0196	CCATCCACGC	GCGTGGATGG	TTGACCAATG	TTGACCAATG	CATTGGTCAA
UDP0197	ACAACCAGGA	TCCTGGTTGT	CTGACCGGCA	CTGACCGGCA	TGCCGGTCAG
UDP0198	AGCAGAATTA	TAATTCTGCT	TCTCATCAAT	TCTCATCAAT	ATTGATGAGA
UDP0199	CAGTCGTGCG	CGCACGACTG	GGACCAACAG	GGACCAACAG	CTGTTGGTCC
UDP0200	GTCTAACCTC	GAGGTTAGAC	AATGTATTGC	AATGTATTGC	GCAATACATT
UDP0201	GAACTCGGTT	AACCGAGTTC	GATCTCTGGA	GATCTCTGGA	TCCAGAGATC
UDP0202	AGTTATCACA	TGTGATAACT	CAGGCGCCAT	CAGGCGCCAT	ATGGCGCCTG
UDP0203	GTAGCATACT	AGTATGCTAC	TTAATAGACC	TTAATAGACC	GGTCTATTAA
UDP0204	CTTCAGTTAC	GTAACTGAAG	GGAGTCGCGA	GGAGTCGCGA	TCGCGACTCC
UDP0205	AGTCCGAGGA	TCCTCGGACT	AACGCCAGAG	AACGCCAGAG	CTCTGGCGTT
UDP0206	ACAGTTCCAG	CTGGAACTGT	CGTAATTAAC	CGTAATTAAC	GTTAATTACG
UDP0207	CCGCATATTC	GAATATGCGG	ACGAGACTGA	ACGAGACTGA	TCAGTCTCGT
UDP0208	TTATCCGATC	GATCGGATAA	GTATCGGCCG	GTATCGGCCG	CGGCCGATAC
UDP0209	ATAGTCTAGC	GCTAGACTAT	AATACGACAT	AATACGACAT	ATGTCGTATT
UDP0210	TATAGTAGCT	AGCTACTATA	GTTATATGGC	GTTATATGGC	GCCATATAAC
UDP0211	ACTCCGGTGG	CCACCGGAGT	GCCTGCCATG	GCCTGCCATG	CATGGCAGGC
UDP0212	GTGCGGTAAG	CTTACCGCAC	TAAGACCTAT	TAAGACCTAT	ATAGGTCTTA
UDP0213	GATATCCTAA	TTAGGATATC	TATACCATGG	TATACCATGG	CCATGGTATA
UDP0214	TCGCGTATAA	TTATACGCGA	GCCGTCTGTT	GCCGTCTGTT	AACAGACGGC
UDP0215	ATTCTAAGCG	CGCTTAGAAT	CAGAGTGATA	CAGAGTGATA	TATCACTCTG
UDP0216	AGCGCTTCGG	CCGAAGCGCT	TGCTAACTAT	TGCTAACTAT	ATAGTTAGCA
UDP0217	GTTGATAGTG	CACTATCAAC	TCAGTTAATG	TCAGTTAATG	CATTAACTGA
UDP0218	AATAGAGCAA	TTGCTCTATT	GTGACCTTGA	GTGACCTTGA	TCAAGGTCAC
UDP0219	CTAACTGTAA	TTACAGTTAG	ACATGCATAT	ACATGCATAT	ATATGCATGT
UDP0220	GCGTACTTAG	CTAAGTACGC	AACATACCTA	AACATACCTA	TAGGTATGTT
UDP0221	TACCGAACTA	TAGTTCGGTA	CCATGTGTAG	CCATGTGTAG	CTACACATGG
UDP0222	GTAGTAATAG	CTATTACTAC	GAGTCTCTCC	GAGTCTCTCC	GGAGAGACTC
UDP0223	GGTTATGCTA	TAGCATAACC	GCTATGCGCA	GCTATGCGCA	TGCGCATAGC
UDP0224	ACAATAGAGT	ACTCTATTGT	ATCGCATATG	ATCGCATATG	CATATGCGAT
UDP0225	GCTTCCACTA	TAGTGGAAGC	AGTACCTATA	AGTACCTATA	TATAGGTACT
UDP0226	AGATATGGCG	CGCCATATCT	GACCGGAGAT	GACCGGAGAT	ATCTCCGGTC
UDP0227	AATATGAAGC	GCTTCATATT	CGTTCAGCCT	CGTTCAGCCT	AGGCTGAACG
UDP0228	TAGCGCTAGT	ACTAGCGCTA	TTACTTCCTC	TTACTTCCTC	GAGGAAGTAA
UDP0229	AGTTAAGAGC	GCTCTTAACT	CACGTCCACC	CACGTCCACC	GGTGGACGTG
UDP0230	CAGATACCAC	GTGGTATCTG	GCTACTATCT	GCTACTATCT	AGATAGTAGC
UDP0231	ACGGCCGTCA	TGACGGCCGT	AGTCAACCAT	AGTCAACCAT	ATGGTTGACT
UDP0232	GTAATTACTG	CAGTAATTAC	CGAGGCGGTA	CGAGGCGGTA	TACCGCCTCG
UDP0233	AAGTCTTGTA	TACAAGACTT	CAGGTGTTCA	CAGGTGTTCA	TGAACACCTG
UDP0234	GTCACCACAG	CTGTGGTGAC	GACAGACAGG	GACAGACAGG	CCTGTCTGTC
UDP0235	ATTAGTGGAG	CTCCACTAAT	TGTACTTGTT	TGTACTTGTT	AACAAGTACA
UDP0236	TGCTAACTAT	ATAGTTAGCA	CTCTAAGTAG	CTCTAAGTAG	CTACTTAGAG
UDP0237	TAAGACCTAT	ATAGGTCTTA	GTCACCACAG	GTCACCACAG	CTGTGGTGAC
UDP0238	TGGTTAAGAA	TTCTTAACCA	TCTACATACC	TCTACATACC	GGTATGTAGA
UDP0239	ACTCTTCCTT	AAGGAAGAGT	CACGTTAGGC	CACGTTAGGC	GCCTAACGTG
UDP0240	GTCTCCTTCC	GGAAGGAGAC	TGGTGAGTCT	TGGTGAGTCT	AGACTCACCA
UDP0241	TCCGCGTTCA	TGAACGCGGA	CTTCGAAGGA	CTTCGAAGGA	TCCTTCGAAG

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0242	AGGTTGCAGG	CCTGCAACCT	GTAGAGTCAG	GTAGAGTCAG	CTGACTCTAC
UDP0243	GAACCATGAA	TTCATGGTTC	GACATTGTCA	GACATTGTCA	TGACAATGTC
UDP0244	TTGAGAGGAT	ATCCTCTCAA	TCCGCAAGGC	TCCGCAAGGC	GCCTTGCGGA
UDP0245	TGGTCTAGTG	CACTAGACCA	ACTGCCTTAT	ACTGCCTTAT	ATAAGGCAGT
UDP0246	AGTGGATAAT	ATTATCCACT	TACGCACGTA	TACGCACGTA	TACGTGCGTA
UDP0247	GGCACGCCAT	ATGGCGTGCC	CGCTTGAAGT	CGCTTGAAGT	ACTTCAAGCG
UDP0248	GATCTCTGGA	TCCAGAGATC	CTGCACTTCA	CTGCACTTCA	TGAAGTGCAG
UDP0249	TGCTGGACAT	ATGTCCAGCA	CAGCGGACAA	CAGCGGACAA	TTGTCCGCTG
UDP0250	CCGAACGTTG	CAACGTTCGG	GGATCCGCAT	GGATCCGCAT	ATGCGGATCC
UDP0251	ATTAATACGC	GCGTATTAAT	TGCGGTGTTG	TGCGGTGTTG	CAACACCGCA
UDP0252V2	CCAGATTCGG	CCGAATCTGG	ATGAATCAAG	ATGAATCAAG	CTTGATTCAT
UDP0252	TAGTCACAAC	GTTGTGACTA	ACATAACGGA	ACATAACGGA	TCCGTTATGT
UDP0253	GGTATTGAGA	TCTCAATACC	GACGTTCGCG	GACGTTCGCG	CGCGAACGTC
UDP0254	CAAGATGCTT	AAGCATCTTG	CATTCAACAA	CATTCAACAA	TTGTTGAATG
UDP0255	ACGAGACTGA	TCAGTCTCGT	CACGGATTAT	CACGGATTAT	ATAATCCGTG
UDP0256	TTATCTTGCA	TGCAAGATAA	TTGAGGACGG	TTGAGGACGG	CCGTCCTCAA
UDP0257	AGATTGTTAC	GTAACAATCT	CTCTGTATAC	CTCTGTATAC	GTATACAGAG
UDP0258V2	TATACCATGG	CCATGGTATA	TCTCGCGGAG	TCTCGCGGAG	CTCCGCGAGA
UDP0258	TCTACCGCTG	CAGCGGTAGA	GCAACAGGTG	GCAACAGGTG	CACCTGTTGC
UDP0259	AACGGTATGA	TCATACCGTT	GGTAACGCAG	GGTAACGCAG	CTGCGTTACC
UDP0260	CAATGGCGCC	GGCGCCATTG	ACCGCGCAAT	ACCGCGCAAT	ATTGCGCGGT
UDP0261	CTAATTCGCT	AGCGAATTAG	AGCCGGAACA	AGCCGGAACA	TGTTCCGGCT
UDP0262	CATGGTCTAA	TTAGACCATG	TCCTAGGAAG	TCCTAGGAAG	CTTCCTAGGA
UDP0263	ATACTGTGTG	CACACAGTAT	TTGAGCCTAA	TTGAGCCTAA	TTAGGCTCAA
UDP0264	GCCGACAAGA	TCTTGTCGGC	CCACCTGTGT	CCACCTGTGT	ACACAGGTGG
UDP0265	CGAGGCGGTA	TACCGCCTCG	CCTCGCAACC	CCTCGCAACC	GGTTGCGAGG
UDP0266	GATATAACAG	CTGTTATATC	GTATAGCTGT	GTATAGCTGT	ACAGCTATAC
UDP0267	TCGCCGGTTA	TAACCGGCGA	GCTACATTAG	GCTACATTAG	CTAATGTAGC
UDP0268	AGACTCTCTT	AAGAGAGTCT	TACGAATCTT	TACGAATCTT	AAGATTCGTA
UDP0269	GCTCGCCTAC	GTAGGCGAGC	TAGGAGCGCA	TAGGAGCGCA	TGCGCTCCTA
UDP0270	AGGATAAGTT	AACTTATCCT	GTACTGGCGT	GTACTGGCGT	ACGCCAGTAC
UDP0271	GAGACATAAT	ATTATGTCTC	AGTTAAGAGC	AGTTAAGAGC	GCTCTTAACT
UDP0272	AGCTGTTATA	TATAACAGCT	TCGCGTATAA	TCGCGTATAA	TTATACGCGA
UDP0273	GTATCATTGG	CCAATGATAC	GAGTGTGCCG	GAGTGTGCCG	CGGCACACTC
UDP0274	AATAGGCCTC	GAGGCCTATT	CTAGTCCGGA	CTAGTCCGGA	TCCGGACTAG
UDP0275	CCGCTTAGCT	AGCTAAGCGG	ATTAATACGC	ATTAATACGC	GCGTATTAAT
UDP0276	TCCTAGGAAG	CTTCCTAGGA	CCTAGAGTAT	CCTAGAGTAT	ATACTCTAGG
UDP0277	TCACAGATCG	CGATCTGTGA	TAGGAAGACT	TAGGAAGACT	AGTCTTCCTA
UDP0278	ACTTGTCCAC	GTGGACAAGT	CCGTGGCCTT	CCGTGGCCTT	AAGGCCACGG
UDP0279	TGTACTTGTT	AACAAGTACA	GGATATATCC	GGATATATCC	GGATATATCC
UDP0280	CACTTAATCT	AGATTAAGTG	CACCTCTTGG	CACCTCTTGG	CCAAGAGGTG
UDP0281	CAGAGTGATA	TATCACTCTG	AACGTTACAT	AACGTTACAT	ATGTAACGTT
UDP0282	GGCGAATTCT	AGAATTCGCC	CGGCAAGCTC	CGGCAAGCTC	GAGCTTGCCG
UDP0283	AGTGGTCAGG	CCTGACCACT	TCTTGGCTAT	TCTTGGCTAT	ATAGCCAAGA
UDP0284	CATTCCAGCT	AGCTGGAATG	ACGGAATGCG	ACGGAATGCG	CGCATTCCGT
UDP0285	CTCGTTATCA	TGATAACGAG	GTTCCGCAGG	GTTCCGCAGG	CCTGCGGAAC
UDP0286	CCTTACTATG	CATAGTAAGG	ACCAAGTTAC	ACCAAGTTAC	GTAACTTGGT
UDP0287	AGAAGCCAAT	ATTGGCTTCT	TGGCTCGCAG	TGGCTCGCAG	CTGCGAGCCA
UDP0288	TAATCGGTAC	GTACCGATTA	AACTAACGTT	AACTAACGTT	AACGTTAGTT

Table 8: Illumina™ UDI Sequences Kit D

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0289V2	GCTACTATCT	AGATAGTAGC	GGCACGCCAT	GGCACGCCAT	ATGGCGTGCC
UDP0289	GGAATTGTTC	GAACAATTCC	TAGAGTTGGA	TAGAGTTGGA	TCCAACTCTA
UDP0290V2	GTCTTCTAAT	ATTAGAAGAC	GCAGGCTGGA	GCAGGCTGGA	TCCAGCCTGC
UDP0290	CCGGACCACA	TGTGGTCCGG	AGAGCACTAG	AGAGCACTAG	CTAGTGCTCT
UDP0291V2	ATGTGCGAGC	GCTCGCACAT	ATGGCTTAAT	ATGGCTTAAT	ATTAAGCCAT
UDP0291	GACTTAGAAG	CTTCTAAGTC	ACTCTACAGG	ACTCTACAGG	CCTGTAGAGT
UDP0292	TGGCAATATT	AATATTGCCA	CGGTGACACC	CGGTGACACC	GGTGTCACCG
UDP0293	GAATGCACGA	TCGTGCATTC	GCGTTGGTAT	GCGTTGGTAT	ATACCAACGC
UDP0294	CGTGTATCTT	AAGATACACG	TGTGCTAACA	TGTGCTAACA	TGTTAGCACA
UDP0295	ATTCATTGCA	TGCAATGAAT	CCAGAAGTAA	CCAGAAGTAA	TTACTTCTGG
UDP0296	TCCTTCATAG	CTATGAAGGA	CTTATACCTG	CTTATACCTG	CAGGTATAAG
UDP0297	TCTAGTCTTC	GAAGACTAGA	ACTAGAACTT	ACTAGAACTT	AAGTTCTAGT
UDP0298	CTCGACTCCT	AGGAGTCGAG	TTAGGCTTAC	TTAGGCTTAC	GTAAGCCTAA
UDP0299	AGTGAGTGAA	TTCACTCACT	TATCATGAGA	TATCATGAGA	TCTCATGATA
UDP0300	GAAGCGGACC	GGTCCGCTTC	CTCACACAAG	CTCACACAAG	CTTGTGTGAG
UDP0301V2	CAAGCCACTA	TAGTGGCTTG	AGTTACTTGG	AGTTACTTGG	CCAAGTAACT
UDP0301	GCTCTCGTTG	CAACGAGAGC	GAATTGAGTG	GAATTGAGTG	CACTCAATTC
UDP0302	GGACCTCAAT	ATTGAGGTCC	CGGATTATAT	CGGATTATAT	ATATAATCCG
UDP0303	GAGTCTCTCC	GGAGAGACTC	TTGAAGCAGA	TTGAAGCAGA	TCTGCTTCAA
UDP0304	AACGGAGCGG	CCGCTCCGTT	TACGGCGAAG	TACGGCGAAG	CTTCGCCGTA
UDP0305	TGTGATGTAT	ATACATCACA	TCTCCATTGA	TCTCCATTGA	TCAATGGAGA
UDP0306	AACATACCTA	TAGGTATGTT	CGAGACCAAG	CGAGACCAAG	CTTGGTCTCG
UDP0307	GTGCTAGGTG	CACCTAGCAC	TGCTGGACAT	TGCTGGACAT	ATGTCCAGCA
UDP0308	CATACTTGAA	TTCAAGTATG	GATGGTATCG	GATGGTATCG	CGATACCATC
UDP0309	CTTGTCTTAA	TTAAGACAAG	GGCTTAATTG	GGCTTAATTG	CAATTAAGCC
UDP0310	AAGAGAGGTG	CACCTCTCTT	CTCGACTCCT	CTCGACTCCT	AGGAGTCGAG
UDP0311	TGCACGAGAA	TTCTCGTGCA	ATACACAGAG	ATACACAGAG	CTCTGTGTAT
UDP0312	ACTTCCTAGC	GCTAGGAAGT	TCTCGGACGA	TCTCGGACGA	TCGTCCGAGA
UDP0313	GTGCTATTAA	TTAATAGCAC	ACCACGTCTG	ACCACGTCTG	CAGACGTGGT
UDP0314	AGCGTGAATG	CATTCACGCT	GTTGTACTCA	GTTGTACTCA	TGAGTACAAC
UDP0315	CCTTAGTGCC	GGCACTAAGG	TCAGGTCAAC	TCAGGTCAAC	GTTGACCTGA
UDP0316	TGTACCGAAT	ATTCGGTACA	AGTCCGAGGA	AGTCCGAGGA	TCCTCGGACT
UDP0317	GGAGATTAGT	ACTAATCTCC	CACTTAATCT	CACTTAATCT	AGATTAAGTG
UDP0318	TACTAACACA	TGTGTTAGTA	TACTCTGTTA	TACTCTGTTA	TAACAGAGTA
UDP0319	TAGGTCGTTG	CAACGACCTA	GCGACTCGAT	GCGACTCGAT	ATCGAGTCGC
UDP0320	ATGCCGACCG	CGGTCGGCAT	CTAGGCAAGG	CTAGGCAAGG	CCTTGCCTAG
UDP0321	CTAGCGTCGA	TCGACGCTAG	CCTCTTCGAA	CCTCTTCGAA	TTCGAAGAGG
UDP0322	TGCCTACGAG	CTCGTAGGCA	TCATCCTCTT	TCATCCTCTT	AAGAGGATGA
UDP0323	ACTAGAACTT	AAGTTCTAGT	GGTAAGATAA	GGTAAGATAA	TTATCTTACC
UDP0324	CACCTCTTGG	CCAAGAGGTG	AACGAGCCAG	AACGAGCCAG	CTGGCTCGTT
UDP0325	AAGCAGATAT	ATATCTGCTT	TAGACAATCT	TAGACAATCT	AGATTGTCTA
UDP0326	GCCAGATCCA	TGGATCTGGC	CAATGCTGAA	CAATGCTGAA	TTCAGCATTG
UDP0327	TTGGATTCAA	TTGAATCCAA	GTCACGGTGT	GTCACGGTGT	ACACCGTGAC
UDP0328	ACTAGCCGTG	CACGGCTAGT	GGTGTACAAG	GGTGTACAAG	CTTGTACACC
UDP0329	CGGCAAGCTC	GAGCTTGCCG	AGGTTGCAGG	AGGTTGCAGG	CCTGCAACCT
UDP0330	GAAGCTAGCT	AGCTAGCTTC	TAATACGGAG	TAATACGGAG	CTCCGTATTA
UDP0331	ACAAGGATTG	CAATCCTTGT	CGAAGACGCA	CGAAGACGCA	TGCGTCTTCG
UDP0332	GCAACAGGTG	CACCTGTTGC	ATTGACACAT	ATTGACACAT	ATGTGTCAAT
UDP0333	CAAGGTGACG	CGTCACCTTG	CAGCCGATTG	CAGCCGATTG	CAATCGGCTG

Sample Name	I7 Bases in Adapter	I7 Bases on Sample Sheet	I5 Bases in Adapter	I5 Bases on Sample Sheet (1)	I5 Bases on Sample Sheet (2)
UDP0335	CCGGAATCAT	ATGATTCCGG	CTCTGACGTG	CTCTGACGTG	CACGTCAGAG
UDP0336	TTGAGCCTAA	TTAGGCTCAA	TCGAATGGAA	TCGAATGGAA	TTCCATTCGA
UDP0337	CCACCTTACA	TGTAAGGTGG	AAGGCCTTGG	AAGGCCTTGG	CCAAGGCCTT
UDP0338	GTTGCAGTTG	CAACTGCAAC	TGAACGCAAC	TGAACGCAAC	GTTGCGTTCA
UDP0339	TCACTCATGT	ACATGAGTGA	CCGCTTAGCT	CCGCTTAGCT	AGCTAAGCGG
UDP0340	GACTGGTTGC	GCAACCAGTC	CACCGAGGAA	CACCGAGGAA	TTCCTCGGTG
UDP0341	ATCGTCGCTC	GAGCGACGAT	CGTATAATCA	CGTATAATCA	TGATTATACG
UDP0342	GGTGCGTTCG	CGAACGCACC	ATGACAGAAC	ATGACAGAAC	GTTCTGTCAT
UDP0343	CGGCGTAAGA	TCTTACGCCG	ATTCATTGCA	ATTCATTGCA	TGCAATGAAT
UDP0344	GACATCAGCT	AGCTGATGTC	TCATGTCCTG	TCATGTCCTG	CAGGACATGA
UDP0345	ACTAATTCAG	CTGAATTAGT	AATTCGATCG	AATTCGATCG	CGATCGAATT
UDP0346	TTCCTCCTTA	TAAGGAGGAA	TTCCGACATT	TTCCGACATT	AATGTCGGAA
UDP0347	TGTGTAAGCT	AGCTTACACA	TGGCACGACC	TGGCACGACC	GGTCGTGCCA
UDP0348	GTGGCTGGTT	AACCAGCCAC	GCCACAGCAC	GCCACAGCAC	GTGCTGTGGC
UDP0349	TCGACTTAAG	CTTAAGTCGA	CAGTAGTTGT	CAGTAGTTGT	ACAACTACTG
UDP0350	CACGTTAGGC	GCCTAACGTG	AGCTCTCAAG	AGCTCTCAAG	CTTGAGAGCT
UDP0351	TGAAGTAAGT	ACTTACTTCA	TCTGGAATTA	TCTGGAATTA	TAATTCCAGA
UDP0352	ACGGAATGCG	CGCATTCCGT	ATTAGTGGAG	ATTAGTGGAG	CTCCACTAAT
UDP0353	GTGTGATATC	GATATCACAC	GACTATATGT	GACTATATGT	ACATATAGTC
UDP0354	ACACAGCGCT	AGCGCTGTGT	CGTTCGGAAC	CGTTCGGAAC	GTTCCGAACG
UDP0355	AGCGCGGTGA	TCACCGCGCT	TCGATACTAG	TCGATACTAG	CTAGTATCGA
UDP0356	CAAGGCTATC	GATAGCCTTG	TACCACAATG	TACCACAATG	CATTGTGGTA
UDP0357	TGCGTCCAGG	CCTGGACGCA	TGGTATACCA	TGGTATACCA	TGGTATACCA
UDP0358	AGGTGCGTAA	TTACGCACCT	GCTCTCGTTG	GCTCTCGTTG	CAACGAGAGC
UDP0359	GCAGCAACGA	TCGTTGCTGC	GTCTCGTGAA	GTCTCGTGAA	TTCACGAGAC
UDP0360	ATCCTTGTCG	CGACAAGGAT	AAGGCCACCT	AAGGCCACCT	AGGTGGCCTT
UDP0361	GAAGGTACAC	GTGTACCTTC	CTGTGAGCTA	CTGTGAGCTA	TAGCTCACAG
UDP0362	TTGGCCAGGT	ACCTGGCCAA	TCACAGATCG	TCACAGATCG	CGATCTGTGA
UDP0363	AGGCCAGACA	TGTCTGGCCT	AGAAGCCAAT	AGAAGCCAAT	ATTGGCTTCT
UDP0364	AGCATTAACT	AGTTAATGCT	ACTGCAGCCG	ACTGCAGCCG	CGGCTGCAGT
UDP0365	ATTACTCACC	GGTGAGTAAT	AACATCTAGT	AACATCTAGT	ACTAGATGTT
UDP0366	GCGCAGAGTA	TACTCTGCGC	CCTTACTATG	CCTTACTATG	CATAGTAAGG
UDP0367	CGCCATACCT	AGGTATGGCG	GTGGCGAGAC	GTGGCGAGAC	GTCTCGCCAC
UDP0368	GCAGGCTGGA	TCCAGCCTGC	GCCAGATCCA	GCCAGATCCA	TGGATCTGGC
UDP0369	GTTATATGGC	GCCATATAAC	ACACAATATC	ACACAATATC	GATATTGTGT
UDP0370	CACTCGCACT	AGTGCGAGTG	TGGAGGTAAT	TGGAGGTAAT	ATTACCTCCA
UDP0371	ACCGGCTCAG	CTGAGCCGGT	CCTTCACGTA	CCTTCACGTA	TACGTGAAGG
UDP0372	ATAGACCGTT	AACGGTCTAT	CTATACGCGG	CTATACGCGG	CCGCGTATAG
UDP0373	TGAACGCAAC	GTTGCGTTCA	GTTGCAGTTG	GTTGCAGTTG	CAACTGCAAC
UDP0374	GTGGTTGAAG	CTTCAACCAC	TTATGCGCCT	TTATGCGCCT	AGGCGCATAA
UDP0375	ACTGAATAGA	TCTATTCAGT	TCTCAGTACA	TCTCAGTACA	TGTACTGAGA
UDP0376	GGACGTCTTG	CAAGACGTCC	AGTATACGGA	AGTATACGGA	TCCGTATACT
UDP0377	GTTGTACTCA	TGAGTACAAC	ACGCTTGGAC	ACGCTTGGAC	GTCCAAGCGT
UDP0378	AGAACCGCGG	CCGCGGTTCT	GGAGTAGATT	GGAGTAGATT	AATCTACTCC
UDP0379	CAGTATCAAT	ATTGATACTG	TACACGCTCC	TACACGCTCC	GGAGCGTGTA
UDP0380	TCCATAATCC	GGATTATGGA	TCCGATAGAG	TCCGATAGAG	CTCTATCGGA
UDP0381	ATGAGAACCA	TGGTTCTCAT	CTCAAGGCCG	CTCAAGGCCG	CGGCCTTGAG
UDP0382	TCGTGGTTGA	TCAACCACGA	CAAGTTCATA	CAAGTTCATA	TATGAACTTG
UDP0383	CAAGTTCATA	TATGAACTTG	AATCCTTAGG	AATCCTTAGG	CCTAAGGATT

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
October 2nd 2024	B	Typo correction

Revvity
940 Winter Street
Waltham, MA, 02451 USA

(800) 762-4000
www.revvity.com