

NGS library prep automated workstation solutions

Over 120 tested and vendor qualified NGS methods

For research use only.

Not for use in diagnostic procedure.



Table of contents

Instruments
Automated library prep throughput and walkaway-time3
Fontus NGS workstation
Sciclone G3 NGSx iQ workstation
Sciclone G3 NGSx HT workstation
Sciclone G3 NGSx workstation
Zephyr G3 NGS workstation
Zephyr G3 NGS iQ workstation
BioQule NGS System
Accessories
Workstation table6
Deck Verification
Consumables and kits
Pipette tips
Microplates and lids
Complete NGS consumable kits
High resolution library sizing with the LabChip GX Touch HT nucleic acid analyzer
NEXTFLEX NGS library preparation kits
Service plans and applications development
Verified, automated NGS methods
RNA Library Preparation Kits
DNA Library Preparation Kits
Small RNA Library Preparation Kits
Exome/Target Capture Library Preparation Kits
Metagenomics Library Preparation Kits
Supplementary Applications & Protocols

Instruments

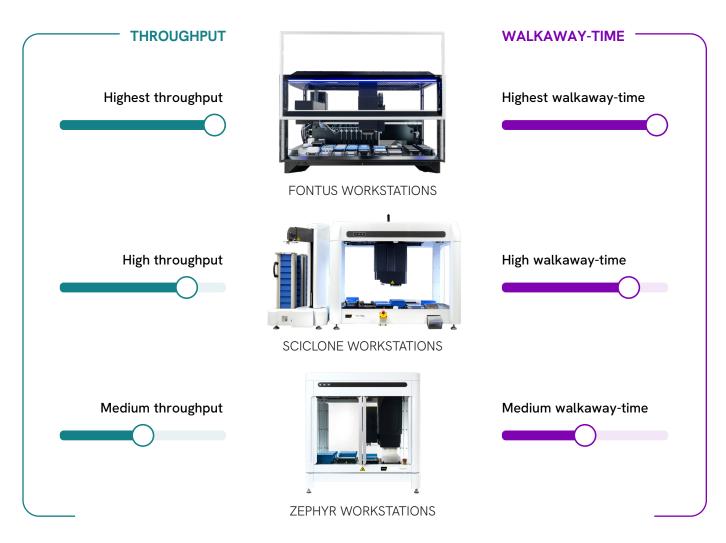
Revvity's automated library prep solutions are designed and programmed for next generation sequencing (NGS) applications. They feature a library of over 120 pre-developed and verified or vendor qualified automated NGS preparation kits such as:

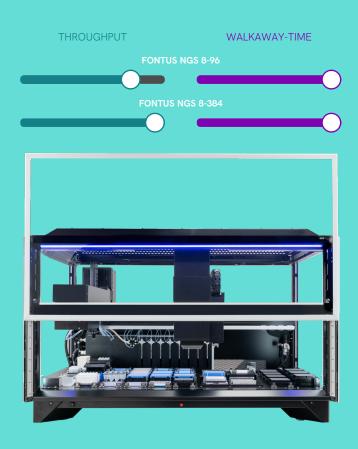
- DNA-Seq
- Oncology
- RNA-Seq
- Target Capture
- Exome
- Metagenomics
- Small RNA-Seq
- Supplementary Protocols

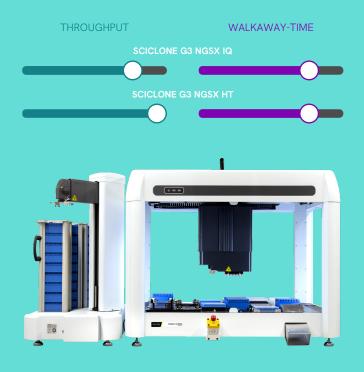
Pre-developed and verified NGS methods allow labs to get up and running quickly and gives confidence that their methods will perform to specifications.

Automating NGS protocols ensures precise step execution while minimizing variability and risk as well as providing extended walk-away time for researchers, freeing them up for higher value tasks. Revvity has a complete line of up NGS automation solutions from low to high throughput and partial to full walk away.

Automated library prep throughput and walkaway-time







Fontus NGS workstation

FONTUS NGS 8-96 - YFL8H02 FONTUS NGS 8-384 - YFL8L02

For the most complete automation and minimum user intervention (longest walkaway), the Fontus™ NGS workstation includes either a 96 or 384 pipetting head for processing up to 96 or 384 samples simultaneously. The Fontus system also includes a highly flexible variable 8-span pipetting arm (Varispan™), which can perform all the initial vials/tubes-to-plates reformatting as well as fast normalization and post assay sample pooling.

The Fontus NGS 8-384 enables miniaturization, which can drastically reduce reagent and per-sample costs while quadrupling throughput.

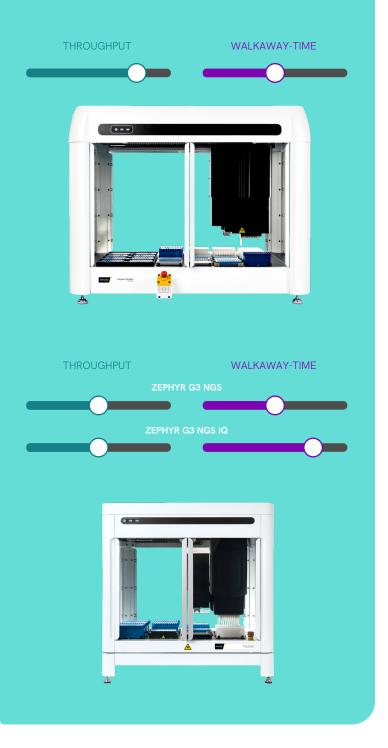
With full walkaway and the highest throughput, the Fontus NGS workstations are the ideal choice for automation of NGS library prep.

Sciclone G3 NGSx workstation

SCICLONE G3 NGSx iQ (96) - CLS152236 SCICLONE G3 NGSx HT (384) - CLS152932

Designed for longer walkaway times than the Sciclone NGSx workstation, this system shares all the same features and also includes an integrated on-deck thermal cycler and a Twister® III robotic arm. The ODTC enables full automation of PCR amplification and heated incubations and the Twister III robot stores and loads up to 27 tip boxes of various labware. This provides increased walkaway time for users and lowers variability and risks related to off-deck incubation and PCR.

For very high throughput NGS protocols, the Sciclone® G3 NGSx HT workstation includes all the walkaway benefits of the iQ workstation but with a 384 pipetting head enabling assay miniaturization, which can drastically reduce reagent and per-sample costs.



Sciclone G3 NGSx workstation

CLS152932

Equipped with a high precision, 96-channel pipetting head, this enables batch processing of up to 96 samples simultaneously. It includes an integrated gripper which facilitates moving labware around the deck. Below deck storage allows enough tip storage to accommodate large NGS protocols and a tip chute is included to seamlessly remove consumables from the deck. This fully enclosed workstation also includes temperature, magnetic and shaking options for precise, standardized NGS library preparation.

Zephyr G3 NGS workstation

ZEPHYR G3 NGS - CLS145300 ZEPHYR G3 NGS IQ - CLS158259

For low to medium-throughput NGS needs, the Zephyr® G3 NGS workstation is a compact, semi-automated solution designed to construct up to 96 NGS libraries per day. This compact workstation is equipped with a highly precise, 96-channel pipetting head and includes an integrated gripper. Also included in this compact workstation is on-deck temperature and shaking integrated peripherals and a waste tip chute.

The Zephyr G3 NGS iQ workstation includes all the same benefits of the Zephyr G3 NGS, but also includes a addition of an integrated thermocycler and a Twister robot to enable a higher level of automation and longer unattended NGS protocol runs.



BioQule NGS system

CLS155700

The BioQule™ NGS system is designed for low throughput NGS library prep and is ideal for labs moving into automation from manual processing. It seamlessly processes up to 8 samples per run and features pre-plated kits, plates and consumables. Just add your samples, reagents, and run!

Accessories

These optional add-ons and accessories can be used to further integrate or provide additional functionality to the liquid handlers for NGS workflows.

Workstation table

The specifically designed tables hold the liquid handler workstation and also has compartments for organizing the under-table hardware in a clean, organized format. The table includes specific compartments for:

- INHECO® ODTC controller
- Compressor
- Tip Waste Bucket
- Fuse box
- Computer
- Wheel Lock
- Network power and air distribution

Fontus NGS workstation table (HH20230001) Width: 158 cm | Height: 92 cm | Depth: 73 cm

Sciclone G3 NGSx workstation table (119877) Width: 120 cm | Height: 91 cm | Depth: 66 cm

Sciclone G3 NGSx iQ and HT workstation table (CLS152481)

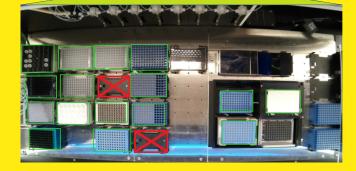
Width: 171 cm | Height: 91 cm | Depth: 66 cm Zephyr G3 NGS iQ workstation table (CLS158557)

Width: 171 cm | Height: 91 cm | Depth: 66 cm



Fontus™ Deck Verification

Identify potential errors before they happen.



Deck Verification is an optional vision system enabled through the WinPREP™ software. A camera integrated above the deck automatically verifies the placement of labware relative to the selected protocol prior to a run.

This ensures correct deck configuration and labware setup is correct prior to starting the run. This can eliminate mid-run errors due to empty tip boxes, misplaced labware and reagents and avoid potential collisions. The vision system has the ability to detect the correct consumables, the presence or absence of disposable tips and determine the number of tips racks present in the recessed deck.

Consumables and kits

Our consumables are manufactured and designed to provide a dependable standardized NGS preparation performance. Our NGS consumable kits combine consumable tips, microplates and lids to perform a single run of 96 samples for a variety of standardized protocols.

Pipette tips

Revvity manufactures and provides high quality pipette tips for the Fontus, Sciclone, and Zephyr workstations. These are made to the highest standards and are tested and verified to ensure peak performance of NGS protocols.

All of our sterile tips are sterilized using irradiation to the current regulatory maximum of 10-6 SAL which is equivalent to the sterility assurance level (SAL) required by the medical device industry. This sterilization ensures the product is free from the following contaminants: human DNA, DNase and RNase and bioburden. Additionally, our filter tips include a filter membrane which functions as a barrier between the pipetting head and the liquid as it is aspirating and dispensing. The filters ensure no-cross contamination is possible from aerosols and reduces overall aerosol intake into the pipetting head.



Microplates and lids

The Fontus, Sciclone, and Zephyr workstations are designed to work with SBS format labware. Widely utilized plates on these workstations include:

- Deepwell microplates: Storing large volumes and for washing steps
- U-bottom microplates: General use
- V-bottom microplates: Reduces dead volume in pipetting steps
- PCR plates: Preparing samples for NGS libraries

Revvity makes a complete line of labware optimized for NGS assays and automation. Please visit www.revvity.com to view our offering.



Complete NGS consumable kits

Revvity offers consumable kits specific to NGS library prep methods. These packs can help user ensure high quality libraries and no missing labware items.



KIT A (6060008)

- NEBNext® Ultra™ II DNA Library Prep Kit for Illumina® (E7645L)
- QIAGEN QIAseq FX DNA Library Kit (180479-180482, 180484)

KIT B (6060009)

- Illumina® TruSeq[™] RNA Sample Prep (RS-122-2001/ RS-122-2002)
- Illumina® TruSeq[™] Stranded Total RNA LT Sample Prep (RS-122-2201/RS-122-2202/RS-122-2301/ RS-122-2302)
- Illumina® TruSeq[™] Stranded Total mRNA LT Sample Prep (RS-122-2101/RS-122-2102/RS-122-2103)
- Illumina® Stranded mRNA Prep, Ligation (20040534)
- Illumina® Stranded Total RNA Prep, Ligation with Ribo-Zero Plus (20040529)

KIT C (6060010)

- Agilent® SureSelectXT Library Prep and Target Enrichment for Illumina Sequencing (G9641B/ G9641C/G9642B/G9642C)
- Agilent® SureSelectXT2 Library Prep and Target Enrichment for Illumina Sequencing (G9621A/ G9621B/G9621C)
- Agilent® SureSelect XT HS Target Enrichment System for Illumina Sequencing (G9702C)
- Agilent® SureSelect XT HS2 DNA Library Preparation and Target Enrichment for Illumina Sequencing (G9985A-D or G9956A-D, G9957B)
- Illumina® RNA Prep with Enrichment, (L) Tagmentation (20040537)

KIT D (6060017)

- NEXTFLEX Variant-Seq[™] SARS-CoV-2 V1 (NOVA-5349-096)
- NEXTFLEX Variant-Seq[™] SARS-CoV-2 V2 (NOVA-5350-096)
- NEXTFLEX Rapid XP Kit v2 (NOVA-5149-21, NOVA-5149-22, NOVA-5149-23)
- NEXTFLEX Rapid DNA-Seq Kit 2.0 (NOVA-5188-01/ NOVA-5188-02/NOVA-5188-03/NOVA-5188-11/ NOVA-5188-12/NOVA-5188-13)

KIT E (6060018)

- NEXTFLEX Rapid Directional RNA-Seq Kit 2.0 (NOVA-5189-01/NOVA-5198-02/NOVA-5198-03)
 - WITH: NEXTFLEX RiboNaut rRNA Depletion Kit (NOVA-512961/NOVA-512962/NOVA-512963)
 - OR: NEXTFLEX Poly(A) Beads 2.0 (NOVA-512991/ NOVA-512992/NOVA-512993)
- QIAGEN QIAseq miRNA UDI Library Kit (331505)

High resolution library sizing with the LabChip GX Touch HT nucleic acid analyzer

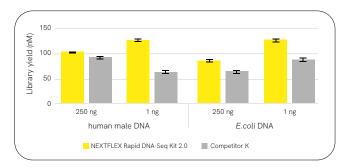
The LabChip® GX Touch™ Nucleic Acid Analyzer provides precise and reliable sizing distribution of NGS libraries to determine your library quality. This advanced system utilizes assays optimized for NGS library quality control and can run up to 192 NGS libraries per run with a per sample analysis time of 68 seconds.



NEXTFLEX NGS library preparation kits

High-quality library preparation is a critical step in Next Generation Sequencing (NGS). Revvity provides a complete portfolio of DNA and RNA NGS library preparation kits and barcodes designed to increase the sensitivity, flexibility, and speed of library prep for the Illumina® and Ion Torrent™ sequencing platforms. We have focused our attention on optimizing our products to cater to the customer's need for a robust and cost-effective solution to achieve reproducible, high-quality sequencing results every time.

Pre-plated automation ready versions of our library prep kits are available for high throughput needs while manual versions cater to the needs of lower throughput users.



Rapid DNA library prep for sequencing on Illumina® Platforms.



Service plans and applications development

Revvity provides dependable coverage for our workstations through service plans and applications development.

Our service plans are designed to enhance your lab's productivity by ensuring critical maintenance requirements aren't compromised.

Our service engineers have an average of 16 years of experience and are cross trained to provide increased support and efficient resolution of workstation issues. Our service plans guarantee a rapid response from our expert engineers to ensure your workstation is in top shape for your important work.

Our applications team provides development services for NGS kit automation. These scientists specialize in automating NGS kits on our Fontus, Sciclone, and Zephyr workstations. Application services can also support development of protocols to automate any new kits for your laboratory processes.

Learn more about rapid DNA library prep

Verified, automated NGS methods

List is current as of **Aug 2023**, inquire for updated list

A variety of NGS reagent kits are automated on Revvity liquid handlers. Each automated protocol is qualified with sequencing data prior to deploying to customers. After we develop the method and thorough wet testing, reagents are tested on the liquid handler with control sample inputs. The final NGS libraries are quality controlled and sequenced to confirm proper library prep by the automation. Our application scientists and subject matter experts ensure the automated liquid handler produces acceptable results for a range of sample inputs, with no cross contamination between wells or column bias.

RNA Library Preparation Kits

Company	Product	Sciclone G3 NGSx	Sciclone G3 NGSx iQ	Zephyr G3	Fontus NGS
Revvity	NEXTFLEX® Rapid Directional RNA-Seq Kit with Poly(A) Beads 2.0	•••	•••	•••	
Revvity	NEXTFLEX® Combo-Seq™ mRNA/miRNA Kit	: •	•••		
10x Genomics®	Chromium™ Single Cell 3' Library Kit v3			•:•	
Agilent®	SureSelect® Strand-Specific RNA Library Prep Kit		•••		
Illumina®	RNA Prep with Enrichment (L) Tagmentation		:		
Illumina®	TruSeq® RNA Access Kit	: •			
Illumina®	Stranded mRNA prep	•••	•:•		
Illumina®	TruSeq® Stranded mRNA (poly-A selection) Kit	•:•	•:•	•:•	
Illumina®	TruSeq® Stranded Total RNA™ Kit	•••	•••	•:•	
Illumina®	Stranded Total RNA Prep, Ligation with Ribo-Zero Plus	: •			
Illumina®	TruSeq® RNA Library Prep Kit v2	•••	•:•	•:•	
Illumina®/Epicentre	Ribozero™/Scriptseq™ Stranded RNA Kit	•:•			
Lexogen®	autoSENSE™ mRNA-Seq Library Prep Kit for Illumina® Sequencing	•:•			
NEB®	NEBNext® Ultra™ RNA Library Prep Kit for Illumina® Sequencing	•:•		•:•	
NEB®	NEBNext® Ultra™ RNA II Library Prep Kit for Illumina® Sequencing	•••			
NuGen®	Ovation® Human Blood RNA-Seq Library Systems	•:•			
NuGen®	Ovation® Human FFPE RNA-Seq Multiplex System	•••			
NuGen®	Ovation® RNA-Seq System v2	•:•			
NuGen®	Ovation® Universal RNA-Seq System (strand-specific)	•••			
PacBio®	HiFiViral SARS-CoV-2	: •			
QIAGEN®	QIASeq® DIRECT SARS-CoV-2	•••	•••		
QIAGEN®	QIASeq® miRNA	•:•			
Roche®	RNA HyperPrep™ Kit	•••	•••	•:•	::
Roche®	RNA HyperPrep™Kit with RiboErase™	: •		•:•	
Roche®	Stranded RNA-Seq Kit	•••		•:•	
Roche®	Stranded RNA-Seq Kit with RiboErase™	•:•		•:•	
Roche®	Stranded mRNA-Seq Kit	•:•		•:•	
Roche®	mRNA HyperPrep™ Kit	•••		•••	
Takara formerly Clontech	SMART-Seq® HT Kit				
Thermo Fisher®	Ion Express™ Plus gDNA Fragment Library Prep Kit	•;•			
Thermo Fisher®	(Ion Torrent™) Ion Total RNA Kit v2	:			
Twist®	cDNA Library Preparation Kit for ssRNA Virus Detection	: •	•••		

DNA Library Preparation Kits

Company	Product	Sciclone G3 NGSx	Sciclone G3 NGSx iQ	Zephyr G3	BioQule NGS System	Fontnus NGS
Revvity	NEXTFLEX® Rapid XP V2 DNA-Seq Kit	•••	•••	•••	•••	
Revvity	NEXTFLEX® Rapid DNA-Seq Kit 2.0	•:•	•••	•••	•••	
Revvity	NEXTFLEX® Cell Free DNA-Seq Kit 2.0	•:•	**	•••		
Revvity	PG-Seq® Kit	•:•				
10x Genomics®	Genomic Preparation	•;•				
ArcherDx®	Universal DNA Reagent Kit v2	:: •				
CareDx®	AlloSeq Tx			•••		
IDT®	xGen DNA Library Prep Kit EZ		•			
Illumina®	Nextera® XT DNA Kit	•;•		•••		
Illumina®	TruSeq® DNA PCR-Free Kit	: •	•••			
Illumina®	TruSeq® Nano DNA Kit	•••				
Illumina®	Illumina® DNA Prep	: •	•••	•••		::
Illumina®	Illumina® DNA Prep with Enrichment	•••	••			::
Illumina®	DNA PCR-Free Library Prep Tagmentation	•••	•••			
NEB®	NEBNext® Ultra™ II DNA Library Prep for Illumina® Instruments	•••		•••		
NEB®	NEBNext® Ultra™ DNA Kit			•:•		
NEB®	NEBNext® dsDNA Fragmentase™ Kit	•••				
NuGen®	Celero DNA-Seq		•••			
NuGen®	Ovation® Ultralow DR Multiplex System (1-96)	•••		•:•		
PacBio®	2kb Template Preparation & Sequencing	•••	•••	•:-		
PacBio®	10kb Template Preparation & Sequencing	•••	•••	•:-		
PacBio®	20kb Template Preparation Using BluePippin™ Size-Selection System	•••		:: -		
PacBio®	Greater than 10kb Template Preparation Using AMPure® PB Beads	•••		•••		
PacBio®	HiFi SMRTbell® Libraries with SMRTbell Prep Kit 3.0	•••	•••			::
PacBio®	Multiplexed Microbial Library Prep with SMRTbell Express Template Prep Kit 2.0	•••	•••			
Roche®	DNA HyperPrep™ Kit	•••	•••	•••		
Roche®	DNA HyperPlus™ Kit	•••	••	•:•		
Roche®	KAPA EvoPlus Kit	•••				
Thermo Fisher®	lon Torrent™ Ion Express® Fragment Library Prep Kit	•••		:: -		
Thermo Fisher®	Ion Express® Plus gDNA Fragment Library Prep Kit	•••		•••		
TwinStrand™ Bioscience	TwinStrand Duplex Sequencing™: Pre-PCR		•••			
TwinStrand™ Bioscience	TwinStrand Duplex Sequencing™: Post-PCR			•:•		
Twist®	Library Preparation Kit	•••	•••			::
QIAGEN®	QlAseq® FX DNA Library Kit	•••				
QIAGEN®	QIAseq® Targeted DNA v3 Panel	•••	•••			
IDT®/Swift®	Accel-NGS® 25 Plus DNA Library Kit	•••				
IDT®/Swift®	xGen Amplicon Panels		: •			

^{::} in progress

Small RNA Library Preparation Kits

Company	Product	Sciclone G3 NGSx	Sciclone G3 NGSx iQ	Zephyr G3
Revvity	NEXTFLEX® Small RNA-Seq Kit v3	•••	•••	•••
Revvity	NEXTFLEX® Small RNA-Seq Kv3 Automation Kit with UDIs	•••	•••	•••

Exome/Target Capture Library Preparation Kits

Company	Product	Sciclone G3 NGSx	Sciclone G3 NGSx iQ	Zephyr G3	Fontus NGS
Revvity	NEXTFLEX® Variant Seq™ SARS-CoV-2 V2 Kit	•••	•••	•••	
Agilent®	HaloPlex® Kit	•••			
Agilent®	HaloPlex® Kit	•••			
Agilent®	SureSelect® XT2 Kit	•••	•:•	•••	
Agilent®	SureSelect® XT Kit	•••	· !·		
Agilent®	SureSelect® XT HS	•••	•••		
Agilent®	SureSelect® QXT Kit	•••		•••	
Cergentis®	TLA Targeted Locus Amplification Kit	•••			
IDT®/Epicentre	xGen Hybridization and Wash Kit		:: -		
IDT®/Epicentre	xGen Exome Hyb Panel v2	•••			
Illumina®	COVIDSeq™ Test	•••	:: -	•••	
Illumina®	Nextera® Rapid Capture Kit	•••		•••	
Illumina®	TruSeq® Rapid Exome Kit	•••			
Illumina®	TruSeq® Custom Amplicon v1.5 Kit			•••	
Illumina®	TruSeq® Custom Amplicon Low Input Kit	:		•••	
Illumina®	TruSeq® Exome Kit	•••			
Illumina®	TruSeq® Focus Panel	•••			
Illumina®	TruSeq® Cancer HotSpot Panel v2	•••			
Illumina®	TruSeq® Comprehensive Panel v3	:			
Illumina®	TruSight® Cancer Kit	•••			
Illumina®	TruSight® Enrichment Kit				
Illumina®	TruSight® Rapid Capture Kit	•••			
Illumina®	TruSight® Tumor Kit				
Illumina®	TruSight® Tumor 15 Kit				
NEB®	NEBNext® Direct® Cancer HotSpot Panel	•			
NuGen®	Ovation® Target Enrichment System	•••			
Roche®	KAPA HyperCap v3	•••	· : ·		::
Thermo Fisher®	lon TargetSeq™ Exome Kit				
Thermo Fisher®	Ion Ampliseq® Panels				
Twist®	Human Core Exome Kit	•••	: •		
Twist®	Twist® Custom Panels	•••	· !·		
Twist®	Fast Hybridization Target Enrichment	•••	•••		

^{::} in progress

Metagenomics Library Preparation Kits

Company	Product	Sciclone G3 NGSx	Sciclone G3 NGSx iQ	Zephyr G3
Revvity	NEXTFLEX® Rapid XP DNA-Seq Kit v2	• • • • • • • • • • • • • • • • • • • •	•••	•••
Revvity	NEXTFLEX® 16S V1-V3 Amplicon-Seq Kit	•		
Revvity	NEXTFLEX® 16S V4 Amplicon-Seq Kit 2.0	• • • • • • • • • • • • • • • • • • • •		
Revvity	NEXTFLEX® 18S ITS Amplicon-Seq Kit	•••		•••
Revvity	NEXTFLEX® Rapid DNA-Seq Kit 2.0	•••		
Revvity	NEXTFLEX® Rapid DNA-Seq Kit	• • • • • • • • • • • • • • • • • • • •		
NuGen®	Ovation® Ultralow Methyl-Seq Library System	•••		

Supplementary Applications & Protocols

Company	Product	Sciclone G3 NGSx	Sciclone G3 NGSx iQ	Zephyr G3
Revvity	NEXTFLEX® Poly(A) Bead Selection	•••		•••
Revvity	Normalization & Pooling Protocol	: •		•••
Beckman Coulter®	SPRI® Purification Protocol	•••		•••
Beckman Coulter®	SPRI® Size Selection Protocol	•••		•••
NuGen®	Encore® Biotin Module	•••		
NuGen®	Ovation® FFPE WTA System	•••		
NuGen®	Ovation® Pico WTA System v2	•••		
Thermo Fisher®	PicoGreen® Quantitation	•••		***
Thermo Fisher®	Qubit® Quantitation			•••
Thermo Fisher®	Quant-iT® Quantitation			•••
Roche®	SYBR® FAST qPCR Kit	•••		
Roche®	Library Quant Kit	•		•••
Roche®	hgDNA Quantification and QC Protocol	:		•••





www.revvity.com



Revvity, Inc. 940 Winter Street, Waltham, MA 02451 USA www.revvity.com

For a complete listing of our global offices, visit www.revvity.com Copyright ©2023, Revvity, Inc. All rights reserved. All other trademarks are the property of their respective owners.

AG062403_04_BRO