HAMILT@N°

NGS STAR Ready-to-Run Solution for NGS Workflows





Scalability Upgradable to on-deck thermal cycling and higher throughput needs.

Reliability

Reputable NGS library preparation solution, already successful for many years.

EFFICIENT. VERSATILE. DURABLE.

- Based on the ML STAR for medium-to-high throughput
- **Barcode Reader allowing full traceability** of samples and reagents
- Integrated On-Deck Thermal Cycler with automation-friendly PCR ComfortLid steps Protocol automation has gained popularity
- Open to (and suitable for) most NGS library preparation kit providers
- **Qualified methods for time-efficient** workflow implementation

UNLOCKING THE POTENTIAL OF **AUTOMATION FOR**

NEXT-GENERATION SEQUENCING NGS has provided the possibility of accelerating genomic research and has reached applied fields within the life sciences community. with the possibility of eliminating labor-intensive and error-sensitive manual library preparation. Key requirements in NGS library preparation are addressed by Hamilton, including accurate and consistent pipetting.

MOST VERSATILE SOLUTION FOR ANY GENETIC LABORA-TORY

Whether small or higher

throughput batches, the NGS STAR copes with various sample numbers. Adding an On-Deck Thermal Cycler (ODTC) option enables full walkaway sample processing. A configurable Multi Probe Head (MPH) allows for the simultaneous pipetting of 96 samples and offers full scalability. Hamilton Heater Shakers (HHS) and a CPAC unit ensure temperature-controlled

- 1. On-Deck Thermal Cvcler (ODTC)
- 2. Plate Stack Carrier
- 3. Tips
- 4. Reagent Troughs
- 5. High and low volume sample carriers with inserts
- 6. 96-well plate positions
- 7. Hamilton Heater Shakers (HHS) for MIDI plates

workflow steps. The Barcode Reader traces samples and reagents, but also ensures correct labware and tip placement ondeck. Additionally, iSWAP and CO-RE Gripper for plate transport steps as well as a Magnetic Stand for bead cleanups complete the workstation.

PERFORMANCE

One deck to run them all -Hamilton has developed a single layout to address the demands of various NGS Library Prepa-



- 8. Invitrogen Ambion Magnetic Stand
- 9. Hamilton Heater Shakers (HHS) for PCR plates
- 10. HHS with flat-bottom
- 11. Inheco Cold Plate Air Cooled (CPAC) Ultraflat Module
- 12. Barcode Reader
- 13. CO-RE Gripper

ration kits. Users benefit from a pool of qualified methods, implementable on the instrument without adjusting hardware equipment. We cover the entire spectrum, ranging from targeted to whole genome, to transcriptome sequencing approaches.

With the NGS STAR, Hamilton offers an Assay-Ready Workstation, designed to meet the needs of any life sciences research environment.

Specifications



System Specification

Description
Temperature: 15-35°C
Humidity: 15%-85% with no condensation
Altitude: 0-2000 m above sea level

Pipetting Channels

Description
CO-RE® Technology
Independent channels
Capacitive (cLLD) liquid level detection
Pressure (pLLD) liquid level detection
Tip Type Detection

Ordering Configurations

Description	Part Number
NGS STAR	806603
NGS STAR 96	806607

Physical Dimensions

Description	NGS STAR	NGS STAR 96
Width	166.4 cm	216 cm
Depth	100.6 cm	100.6 cm
Height	90.3 cm	90.3 cm
Weight	approx. 210 kg	approx. 225 kg

Pipetting Volumes

Tip Size	Precision CV (%)
50 µl	1 µL Volume ([R] 5%; CV 4%)
300 µl	50 μL Volume ([R] 2%; CV 0.75%)
1000 µl	100 μL Volume ([R] 2%; CV 0.75%)

Add-On Option

Description	Part Number
NGS STAR ODTC 96 Kit and iSWAP	806604 (1x), 190220 (1x)
NGS STAR 96 ODTC 96 Kit and iSWAP	806608 (1x), 190220 (1x)
UV Upgrade Kit STAR AL	10107470

Required Consumables

Labware***	Manufacturer	Part Number
50 μL Filtered Tips	Hamilton	235948
300 µL Filtered Tips	Hamilton	235903
1000 µL Filtered Tips	Hamilton	235905
Biohazard Waste Bags	Hamilton	199203
50 ml Reagent Troughs	Hamilton	56694-01
MIDI (0.8 ml) 96-Well Plates	Thermo Fisher Scientific	AB-0859
HSP (PCR) 96-Well Plates	Bio-Rad	HSP-9601

*** Additional Labwares may be needed, depending upon the specific NGS application requirements.

© 2021 Hamilton Company. All rights reserved. All trademarks are owned and/or registered by Hamilton Company in the U.S. and/or other countries. Lit. No. F-2107-04 - 07/2021

HAMILTØN

To find a subsidiary or distributor in your area, please visit: www.hamiltoncompany.com/support.

Web: www.hamiltoncompany.com/robotics Email: infoservice@hamiltonrobotics.com United States +1-775-858-3000 United Kingdom, Ireland +44 121 272 92 80 Brazil +55 11 95914 5000 China +86 21 6164 6567 Denmark, Norway, Sweden, Finland +46 8410 27 373

France +33 184 008 420 Germany, Switzerland, Austria, Benelux +49 89 248 804 804 Italy +39 039 930 06 06 Japan +81 3 6435 6850 Spain, Portugal +34 930 186 262