Agilent Bioanalyzer and TapeStation Systems

SYSTEMS, CONSUMABLES AND SUPPLIES



Agilent Technologies

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Cell Solutions for the 2100 Bioanalyzer System

NOTE: Only for existing G2938B and G2938C instruments. Visit our website for information on cell analysis kits: www.agilent.com/genomics/BioanalyzerCellKits

Agilent 2100 Bioanalyzer System

One platform – Endless possibilities

The Agilent 2100 Bioanalyzer system offers fast and reliable separation, sizing and quantification of DNA, RNA and proteins by miniaturized on-chip electrophoresis surpassing labor intensive slab gels by speed, reproducibility and independence from user influences.

Key benefits

- · Provides DNA quality control in next generation sequencing workflows.
- RNA Integrity Number (RIN) is the most widely used standard for RNA integrity measurements.
- High sensitivity with detection in the picogram range for DNA, RNA, and protein analysis.
- High assay accuracy and precision.
- Minimal sample consumption (1 μL for nucleic acids and 4 μL for diluted proteins) with results in as little as 25 minutes.
- Replaceable electrode cartridge can be easily exchanged for contamination-free switch of methods.
- Digital data with various data display options gel view, electropherograms, and tables – allow convenient analysis, archiving, and simple comparison of samples from multiple chips.
- Multiple exportable data formats (xml, csv, html, pdf, wmf, jpg, tif, bmp, and aia).
- · Minimum exposure to hazardous materials.
- Supports 21 CFR Part 11 compliance.

Ensuring high quality RNA for downstream applications

The Agilent 2100 Bioanalyzer system is a well-accepted standard for integrity measurements of RNA. In less than 30 minutes, total RNA, mRNA, or small RNA is checked for quantity and degradation. The unique RIN offers an objective measurement of total RNA quality to ensure reproducible results from downstream experiments, such as next generation sequencing, gene expression microarrays or gPCR.







The Agilent 2100 Bioanalyzer system is a versatile system for sizing, quantification and quality control of DNA, RNA, and proteins on a single platform.

Agilent 2100 Bioanalyzer Systems

Part Number	Description	Quantity
G2939BA	2100 Bioanalyzer Instrument For electrophoretic assays only. Model number G2939B. Includes the 2100 Bioanalyzer instrument, electrode cartridge, 2100 Expert software, instrument and electrophoresis licenses, chip priming station, chip vortexer, test chips, accessories, and installation and familiarization services. <i>Note: Does not include PC. It is optional to add on the 2100 Expert SW Laptop PC Bundle for a fully validated system.</i> <i>(Required for Security Pack installations)</i>	1 system
G2953CA	2100 Expert SW Laptop PC Bundle Laptop PC with 2100 Expert Software pre-installed. <i>Note: Required for Security Pack installations.</i>	1 pc

Agilent 2100 Expert Software

Part Number	Description	Quantity
G2946CA	2100 Expert Software Upgrade Package for upgrade to the latest revision of 2100 Expert software. Includes the required license keys to run the instrument.	1 upgrade
G2949CA	2100 Expert Security Pack License For CFR 21 Part 11 compliance. Includes compliance software upgrade and license.	1 license
-	2100 Expert Data Review Software Software for analysis of data generated by the 2100 Bioanalyzer system. No purchase or licenses required. Download free of charge from: www.agilent.com/genomics/2100Expert	

Accessories and Spare Parts

Part Number	Description	Quantity
5065-4413	Electrode Cartridge Removable cartridge with detachable 16-pin electrode assembly for easy cleaning. For RNA, DNA, and protein assays.	1 cartridge
5065-9951	Electrode Cleaner Kit Includes additional electrode cleaners for the maintenance of the electrode cartridge.	7 electrode cleaners
G2938-68300	Test Chip Kit For running instrument diagnostics and troubleshooting electrophoretic assays. Includes autofocus chip, electrode/diode test chip, and documentation.	1 kit
5065-4401	Chip Priming Station Used to load gel matrix into a chip with a syringe provided in each assay kit – used for RNA, DNA, and protein assays. Includes priming station, timer, and 1 syringe clip.	1 kit
5042-1398	Adjustable Clip for Priming Station Used in combination with a syringe to apply defined pressure for chip priming.	1 clip
G2938-68716	Gasket Kit for Chip Priming Station Includes 1 syringe adapter, 10 gaskets, and 1 mounting ring.	1 kit
5185-5990	Filters for Gel Matrix Extra spin filters for the gel matrix in RNA, DNA, and protein assays.	25 filters
2110-0007	Fuse for 2100 Bioanalyzer Power Supply 1 A / 250 V.	1 fuse
RS232-61601	RS-232 Cable Connector cable between desktop or laptop PC and Agilent 2100 Bioanalyzer instrument.	1 cable
5188-8031	USB Serial Adapter Cable Connects RS-232 cables to USB PC ports (for PCs without serial ports).	1 cable
5065-4492	Pressure Cartridge Removable cartridge with pressure adapter for cell assays. Note: Only compatible with G2938B and G2938C instruments with 2100 Expert software equipped with a flow cytometry license.	1 cartridge
G2938-68200	Cell Test Chip Kit For running instrument diagnostics and troubleshooting cell assays. Includes cell autofocus chip and documentation. <i>Note: Only compatible with G2938B and G2938C instruments.</i>	1 kit
5065-4478	Pressure Adapter Kit For use with pressure cartridge. Includes 1 mounting ring and 5 pressure adapters with gasket. Note: Only compatible with G2938B and G2938C instruments.	1 kit

*Replacement chip adapters for the MS 3 vortexer are available through IKA (part number: 3428300) only.

Services

For more details on our service portfolio, please contact your sales representative or Agilent's Worldwide Sales and Support Phone Assistance

www.agilent.com/genomics/contactus



The Agilent DNA kits, together with the Agilent 2100 Bioanalyzer system, are ideal for automated sizing and quantification of PCR fragments, restriction digests or fragmented DNA.

DNA Kits and Reagents

Part Number	Description	Quantity
5067-4626	High Sensitivity DNA Kit For the separation, sizing and quantification of dsDNA samples of limited abundance ranging from 50 to 7000 bp. Includes 10 chips, reagents, ladder and consumables. <i>Note: Only compatible with G2939B, G2939A, G2938C, and G2938B Bioanalyzer instrument models.</i>	For 110 samples
5067-4627	High Sensitivity DNA Reagents Includes reagents and ladder; no chips.	For 10 chips
5067-1504	DNA 1000 Kit For sizing and quantification of dsDNA fragments ranging from 25 to 1000 bp. Includes 25 chips, reagents, ladder and consumables.	For 300 samples
5067-1505	DNA 1000 Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1506	DNA 7500 Kit For sizing and quantification of dsDNA fragments ranging from 100 to 7500 bp. Includes 25 chips, reagents, ladder and consumables.	For 300 samples
5067-1507	DNA 7500 Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1508	DNA 12000 Kit For sizing and quantification of dsDNA fragments ranging from 100 to 12000 bp. Includes 25 chips, reagents, ladder and consumables.	For 300 samples
5067-1509	DNA 12000 Reagents Includes reagents and ladder; no chips.	For 25 chips

DNA Specifications

Analytical Specifications	High Sensitivity DNA	DNA 1000	DNA 7500	DNA 12000
Sizing range	50 — 7000 bp	25 — 1000 bp	100 — 7500 bp	100—12000 bp
Sizing resolution	50 - 600 bp: ±10 % 600 - 7000 bp: ± 20 %	25 – 100 bp: 5 bp 100 – 500 bp: 5 % 500 – 1000 bp: 10 %	100 – 1000 bp: 5 % 1000 – 7500 bp: 15 %	100 – 1000 bp: 5 % 1000 – 12000 bp: 15 %
Sizing accuracy*	10 %	10 %	10 %	15 %
Sizing reproducibility*	5 % CV	5 % CV	5 % CV	5 % CV
Quantification accuracy*	20 %	20 %	20 %	25 %
Quantification reproducibility*	50 – 2000 bp: 15% CV 2000 – 7000 bp: 10% CV	25 – 500 bp: 15 % CV 500 – 1000 bp: 5 % CV	100 – 1000 bp: 10 % CV 1000 – 7500 bp: 5 % CV	100 – 1000 bp: 15 % CV 1000 – 12000 bp: 10 % CV
Quantitative range*	5—500 pg/µL	0.5 – 50 ng/µL	0.5 – 50 ng/µL	0.5 – 50 ng/µL
Maximum sample buffer strength	10 mM Tris and 1 mM EDTA	250 mM for KCl 250 mM for NaCl 15 mM for MgCl ₂	250 mM for KCl 250 mM for NaCl 15 mM for MgCl ₂	250 mM for KCl 250 mM for NaCl 15 mM for MgCl ₂
Physical Specifications				
Analysis time	45 minutes	35 minutes	30 minutes	30 minutes
Samples per chip	11	12	12	12
Sample volume	1 µL	1 µL	1 µL	1 µL
Kit stability**	4 months	4 months	4 months	4 months
Kit size	110 samples/kit	300 samples/kit	300 samples/kit	300 samples/kit

* Determined by analyzing the DNA ladder as sample ** Minimum guarantee

DNA Application Notes

Publication Number	Description
5991-5128EN	Absolute real-time PCR: A comparison of spectrophotometric and on-chip methods for external standard curve construction from different nucleic acid dosages
5991-0483EN	DNA quality control of formalin-fixed paraffin-embedded and fresh-frozen tissues prior to target-enrichment and next generation sequencing
5990-8382EN	Low input DNA size selection on the Pippin Prep System using the Agilent 2100 Bioanalyzer system with the Agilent High Sensitivity DNA kit
5990-5008EN	Improving sample quality for target enrichment and next-gen sequencing with the Agilent High Sensitivity DNA kit and the Agilent SureSelect Target Enrichment platform
5990-4942EN	Automation of Agencourt AM Pure Purification kit for the purification of Next-Generation Sequencing sample preparation reactions on Bravo
5989-6836EN	Use of the Agilent 2100 Bioanalyzer system for basmati rice authenticity testing

This list only provides an overview of selected DNA application notes. Visit our website at

www.agilent.com/genomics/bioanalyzer for a complete list of all available application and technical notes.



The Agilent RNA kits and RNA Integrity Number (RIN) are a widely accepted for RNA quality assessment. Perform fast, easy and precise integrity checks and sample quantification before any RNA-dependent application.

RNA Kits and Reagents

Part Number	Description	Quantity
5067-1511	RNA 6000 Nano Kit For analysis and quantification of total RNA and mRNA samples of 25 to 500 ng/μL in concentration. Includes 25 chips, reagents, ladder and consumables.	For 300 samples
5067-1512	RNA 6000 Nano Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1529	RNA 6000 Nano Ladder Includes ladder only.	For 25 chips
5067-1513	RNA 6000 Pico Kit For the analysis of RNA samples of low abundance down to 50 pg/µL of total RNA or 250 pg/µL of mRNA. Includes 25 chips, reagents, ladder and consumables.	For 275 samples
5067-1514	RNA 6000 Pico Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1535	RNA 6000 Pico Ladder Includes ladder only.	For 25 chips
5067-1548	Small RNA Kit For the analysis and quantification of small RNA samples ranging from 6 to 150 nt in size and 50 to 2000 pg/µL in concentration. Includes 25 chips, reagents, ladder and consumables.	For 275 samples
5067-1549	Small RNA Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1550	Small RNA Ladder Includes ladder only.	For 25 chips

RNA Specifications

Analytical Specifications	RNA 6000 Nano Total RNA	RNA 6000 Nano mRNA	RNA 6000 Pico Total RNA	RNA 6000 Pico mRNA	Small RNA
Quantitative range	25 — 500 ng/μL	25 – 250 ng/µL	-	-	50 — 2000 pg/µL of purified miRNA in water
Qualitative range	5 — 500 ng/µL	25 – 250 ng/µL	50 — 5000 pg/µL in water	250 — 5000 pg/μL in water	50 — 2000 pg/µL of purified miRNA in water
Sizing range	-	-	-	-	6 – 150 nt
Sensitivity (signal/noise > 3)	5 ng/µL in water	25 ng/µL in water	50 pg/μL in water 200 pg/μL in TE	250 pg/μL in water 500 pg/μL in TE	50 pg/µL in water**
Quantification reproducibility (within a chip)	10 % CV	10 % CV	20 % CV	20 % CV	25 % CV
Quantification accuracy*	20 %	20 %	30 %	30 %	-
Maximum sample buffer strength	100 mM Tris 0.1 mM EDTA or 125 mM NaCl or 15 mM MgCl ₂	100 mM Tris 0.1 mM EDTA or 125 mM NaCl or 15 mM MgCl ₂	50 mM Tris 0.1 mM EDTA or 50 mM NaCI or 15 mM MgCl ₂	50 mM Tris 0.1 mM EDTA or 50 mM NaCI or 15 mM MgCl ₂	10 mM Tris 0.1 mM EDTA
Physical Specifications					
Analysis time	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes
Samples per chip	12	12	11	11	11
Sample volume	1 µL	1 µL	1 µL	1 µL	1 µL
Kit stability***	Minimum 4 months at 4 °C	Minimum 4 months at 4 °C	Minimum 4 months at 4 °C	Minimum 4 months at 4 °C	Minimum 4 months at 4 °C
Kit size	RNA Nano 12/chip = 300 samples/kit	RNA Nano 12/chip = 300 samples/kit	RNA Pico 11/chip = 275 samples/kit	RNA Pico 11/chip = 275 samples/kit	Small RNA 11/chip = 275 samples/kit

* Determined analyzing the RNA ladder as sample ** Measured for the 40 nt fragment of the Small RNA ladder

***Minimum guarantee

RNA Application Notes

Publication Number	Description
5989-1165EN	RNA Integrity Number (RIN) – Standardization of RNA quality control
5989-7730EN	Optimizing real-time quantitative PCR experiments with the Agilent 2100 Bioanalyzer system
5989-7870EN	Analysis of miRNA content in total RNA preparations using the Agilent 2100 Bioanalyzer system
5989-8539EN	Analysis of small RNAs from Drosophila Schneider cells using the Small RNA assay on the Agilent 2100 Bioanalyzer system
5990-3558EN	Automation of Stratagene Absolutely RNA 96 Microprep kit with the Bravo Automated Liquid Handling platform
5990-5557EN	RNA quality control in miRNA expression analysis
5990-8850EN	Assessing integrity of plant RNA with the Agilent 2100 Bioanalyzer system
5991-7557EN	Agilent integrated solutions for design, synthesis and quality control of Guide RNA for CRISPR-Cas9 genome editing workflows

This list only provides an overview of selected RNA application notes. Visit our website at

www.agilent.com/genomics/bioanalyzer for a complete list of all available application and technical notes.



The Agilent Protein kit portfolio provides a fast and flexible way for the assessment of protein concentration, identity, and purity in a wide variety of samples.

Protein Kits and Reagents

Part Number	Description	Quantity
5067-1515	Protein 80 Kit For sizing and quantification of protein samples from 5 to 80 kDa. Includes 25 chips, reagents, ladder and consumables.	For 250 samples
5067-1516	Protein 80 Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1517	Protein 230 Kit For sizing and quantification of protein samples from 14 to 230 kDa. Includes 25 chips, reagents, ladder and consumables.	For 250 samples
5067-1518	Protein 230 Reagents Includes reagents and ladder; no chips.	For 25 chips
5067-1575	High Sensitivity Protein 250 Kit For sizing and highly sensitive quantification of protein samples from 10 to 250 kDa. Includes 10 chips, analysis and labeling reagents, and consumables. <i>Note: Only supported for G2938B, G2938C and G2939A Bioanalyzer instruments.</i>	For 100 samples
5067-1576	High Sensitivity Protein 250 Reagents Includes reagents for Bioanalyzer analysis; no chips.	For 10 chips
5067-1577	High Sensitivity Protein 250 Labeling Kit Includes reagents for labeling reaction.	For 100 samples
5067-1578	High Sensitivity Protein 250 Ladder Includes ladder.	For 10 chips

Protein Specifications

Analytical specifications	Protein 80	Protein 230	High Sensitivity Protein 250
Sizing range	5 – 80 kDa	14 – 230 kDa	10 – 250 kDa
Typical sizing resolution	10 %	10 %	10 %
Typical sizing accuracy	10 % (CAII, BLG)	10 % (BSA, CAII)	10 % (BSA)
Sizing reproducibility	3 % CV (CAII, BLG)	3 % CV (BSA, CAII)	3 % CV (BSA)
Sensitivity (signal/noise > 3)	6 ng/µL CAII in PBS 15 ng/µL BSA in PBS 10 ng/µL CAII in 0.5 M NaCI 30 ng/µL BSA in 0.5 M NaCI	6 ng/µL CAII in PBS 15 ng/µL BSA in PBS 30 ng/µL BSA in 0.5 M NaCI	1 pg/μL labeled BSA in water on chip 5 pg/μL labeled BSA in PBS on chip (Labeling reaction at 1 ng/μL of total protein)
Quantitative range	60 – 2000 ng/µL CAII in PBS	15 – 2000 ng/μL CAII in PBS 30 – 2000 ng/μL BSA in PBS	0.3 – 3000 ng/µL BSA
Qualitative range	6-4000 ng/µL CAII and BLG in PBS	6 – 5000 ng/µL CAII in PBS 15 – 5000 ng/µL BSA in PBS	-
Quantification reproducibility	20 % CV (CAII, BLG)	20 % CV (BSA, CAII)	20 % CV (BSA)
Physical specifications			
Analysis time	30 minutes	25 minutes	30 minutes
Samples per chip	10	10	10
Sample volume	4 µL	4 µL	5 µL
Kit stability*	4 months (see box for storage temp.)	Minimum 4 months (see box for storage temp.)	Minimum 6 months at -20 °C
Kit size	Protein 10/chip = 250 samples/kit	Protein 10/chip = 250 samples/kit	Protein 10/chip = 100 samples/kit

 $\label{eq:cAII} \mbox{CAII} = \mbox{carbonic anhydrase}, \mbox{BSA} = \mbox{bovine serum albumin}, \mbox{BLG} = \mbox{beta-lactoglobulin} \\ \mbox{*Minimum guarantee}$

Protein Application Notes

Publication Number	Description
5989-7735EN	Rapid wheat varietal identification using the Agilent 2100 Bioanalyzer system and automated pattern-matching
5990-4097EN	Immunoprecipitation and the High Sensitivity Protein 250 assay
5990-8125EN	Milk protein analysis with the Agilent 2100 Bioanalyzer system and the Agilent Protein 80 kit
5990-9593EN	Analysis of PEGylated proteins using the Agilent 2100 Bioanalyzer system
5991-3435EN	A comparative study of analytical parameters for proteins with different degrees of glycosylation

This list only provides an overview of selected protein application notes. Visit our website at

www.agilent.com/genomics/bioanalyzer for a complete list of all available application and technical notes.

Agilent 4200 TapeStation System

A complete solution for true end-to-end electrophoretic quality control for DNA and RNA samples

The Agilent 4200 TapeStation system for true end-to-end sample quality control (QC) within any next-generation sequencing (NGS), microrarray (including array CGH) or qPCR workflow. The system offers walk away operation with fully automated sample processing. Analyze any sample number from 1 up to 96 samples at constant cost per sample for the complete portfolio of DNA and RNA assays. The ready-to-use ScreenTape technology enables ultimate flexibility for switching between assays as well as sample preparation. Provide your samples in 16-well tube strips or 96-well plates and review reliable results within 1-2 minutes per sample, or less than 90 minutes for 96 samples.

Key benefits

- Simplify your workflow with fully automated sample processing and ready-to-use ScreenTape technology.
- 1 up to 96 samples are analyzed with constant costs per sample providing scalable throughput.
- · Switch with ease between DNA and RNA ScreenTape assays for greatest flexibility.
- Results are obtained in as little as 1-2 minutes per sample, or less than 90 minutes for 96 samples.
- Achieve user-independent results with minimal manual intervention and excellent reproducibility for sizing, concentration and integrity assessment.
- Requires as little as 1-2 µL of DNA or RNA samples, even for high sensitivity analysis.
- Rely on the integrity standards for RNA (RNA Integrity Number equivalent, RIN^e) and genomic DNA (DNA Integrity Number, DIN).
- Carryover is eliminated as the ScreenTape device analyses each sample in a separate lane with individual loading tips for each sample.



Genomic DNA smears at different degradation stages (A), long range PCR fragments (B) and pre-capture library preparation (C) analyzed with Genomic DNA ScreenTape assay, D5000 ScreenTape assay and D1000 ScreenTape assay, respectively.



True end-to end sample QC DNA analysis during the NGS workflow

The 4200 TapeStation system offers a full range of sizing applications for all steps within any NGS worklfow:

- Sample QC for genomic DNA starting material including the DNA Integrity Number (DIN)
- Shearing of genomic DNA
- Library amplification
- Post-capture amplified libraries after target enrichment





Agilent 4200 TapeStation System

Part Number	Description	Quantity
G2991AA	4200 TapeStation System For DNA and RNA analysis. Includes the 4200 TapeStation instrument, laptop with 4200 TapeStation software, vortexer, accessories, consumables and user information.	1 system

4200 TapeStation Software

Description

4200 TapeStation Controller Software and 4200 TapeStation Analysis Software

Software for instrument control and analysis of data generated by the Agilent 4200 TapeStation system. The **Agilent LabAdvisor** software with TapeStation AddOn offers advanced instrument diagnosis. The **Agilent Information Center** is a software repository for all 4200 TapeStation user information. No purchase necessary. Download free of charge from: www.agilent.com/genomics/tapestation-sw

Accessories and Spare Parts

5042-8502	96-well sample plates	25 plates
5067-5154	96-well plate foil seal	100 foils
5067-5599	Loading tips (112 tips/pk)	10 packs
5067-5598	Loading tips (112 tips/pk)	1 pack
401428	Optical tube strips, 8x strip	1 box of 120
401425	Optical caps, 8x strip	1 box of 120
5067-5601	TapeStation Test Tape	1 test tape
5067-5783	Needle Change Cartridge	1 cartridge
G2991-40007	ScreenTape Rack	1 rack
G2992-40042	Tube Strip Holder	1 holder
G2992-40046	Tip Waste Bucket	1 bucket
5188-8047	USB cable, male-A – male-B	1 cable

Services

For more details on our service portfolio, please contact your sales representative or Agilent's Worldwide Sales and Support Phone Assistance **www.agilent.com/genomics/contactus**

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The DNA ScreenTape assays for the Agilent 4200 TapeStation system are ideal for sample QC of input genomic DNA and downstream analysis within the Next Generation Sequencing workflow. Select the sizing range appropriate for your application.



DNA Consumables and Reagents

Part Number	Description	Quantity		
D1000 ScreenTape Assay – 35 bp to 1,000 bp				
5067-5582	D1000 ScreenTape For the analysis of DNA from 35 to 1,000 bp. Includes 7 ScreenTape devices.	For 112 samples		
5067-5583	D1000 Reagents For the analysis of DNA from 35 to 1,000 bp. Includes ladder and sample buffer. Order with 5067-5582.	For 112 samples		
5067-5586	D1000 Ladder For the analysis of DNA from 35 to 1,000 bp. Includes 10 μL ladder.			
5067-5602	D1000 Sample Buffer For the analysis of DNA from 35 to 1,000 bp. Includes 400 μL sample buffer.			
5067-5584	High Sensitivity D1000 ScreenTape For the high sensitivity analysis of DNA from 35 to 1,000 bp. Includes 7 ScreenTape devices.	For 112 samples		
5067-5585	High Sensitivity D1000 Reagents For the high sensitivity analysis of DNA from 35 to 1,000 bp. Includes ladder and sample buffer. Order with 5067-5584.	For 112 samples		
5067-5587	High Sensitivity D1000 Ladder For the analysis of DNA from 35 to 1,000 bp. Includes 20 μL ladder.			
5067-5603	High Sensitivity D1000 Sample Buffer For the high sensitivity analysis of DNA from 35 to 1,000 bp. Includes 300 μL sample buffer.			

(Continued)

Part Number	Description	Quantity
D5000 ScreenTape	e Assay – 100 bp to 5,000 bp	
5067-5588	D5000 ScreenTape For the analysis of DNA from 100 to 5,000 bp. Includes 7 ScreenTape devices.	For 105 samples
5067-5589	D5000 Reagents For the analysis of DNA from 100 to 5,000 bp. Includes ladder and samples buffer. Order with 5067-5588.	For 105 samples
5067-5590	D5000 Ladder For the analysis of DNA from 100 to 5,000 bp. Includes 10 µL ladder.	
5067-5592	High Sensitivity D5000 ScreenTape For the high sensitivity analysis of DNA from 100 to 5,000 bp. Includes 7 ScreenTape devices.	For 105 samples
5067-5593	High Sensitivity D5000 Reagents For the high sensitivity analysis of DNA from 100 to 5,000 bp. Includes sample buffer and ladder. Order with 5067-5592.	For 105 samples
5067-5594	High Sensitivity D5000 Ladder For the high sensitivity analysis of DNA from 100 to 5,000 bp. Includes 20 µL ladder.	
Genomic DNA ScreenTape Assay – 200 bp to >60,000 bp		
5067-5365	Genomic DNA ScreenTape For the analysis of genomic DNA from 200 to > 60,000 bp. Includes 7 ScreenTape devices.	For 105 samples
5067-5366	Genomic DNA Reagents For the analysis of genomic DNA from 200 to > 60,000 bp. Includes ladder and sample buffer. Order with 5067-5365.	For 105 samples

DNA Specifications

Analytical Specifications	D1000 ScreenTape	High Sensitivity D1000 ScreenTape	D5000 ScreenTape	High Sensitivity D5000 ScreenTape	Genomic DNA Specifications
Sizing range	35—1,000 bp	35—1,000 bp	100 — 5,000 bp	100 — 5,000 bp	200 to > 60,000 bp
Typical resolution	35 – 300 bp: 15% 300 – 1,000 bp: 10%	35 – 300 bp: 15% 300 – 1,000 bp: 10%	400 – 5,000 bp: 15%	400 – 5,000 bp: 15%	
Sensitivity ¹	0.1 ng/µL	5 pg/µL	0.1 ng/µL	5 pg/µL	0.5 ng/µL
Sizing precision ²	5% CV	5% CV	5% CV	10% CV	200–15,000 bp: 15% CV
Sizing accuracy ²	±10%3	±10%3	±10%	±15%	200 – 15,000 bp: ±15%
Quantification precision	0.1 – 1 ng/μL: 15% CV 1 – 50 ng/μL: 10% CV	15% CV	0.1 – 1 ng/µL: 15% CV 1 – 50 ng/µL: 10% CV	15% CV	15% CV⁵
Quantitative accuracy ⁴	±20%	±20%	±20%	±25%	±20% ⁵
Quantification range	0.1 — 50 ng/µL	10—1,000 pg/µL	0.1 – 50 ng/µL	10—1,000 pg/µL	10 — 100 ng/µL
DIN functional range ⁶	-	-	-	-	5 - 300 ng/µL
Maximum sample buffer strength	20 mM KCI 60 mM Phosphate Buffer 60 mM Guanidine-HCI 240 mM NaCI 60 mM Acetate	7 mM KCl 20 mM Phosphate Buffer 20 mM Guanidine-HCl 80 mM NaCl 20 mM Acetate	250 mM KCl 250 mM Tris-HCl 25 mM Guanidine-HCl 125 mM NaCl 50 mM Acetate 25 mM MgCl ₂ 25 mM BSA	25 mM KCl 25 mM Tris-HCl 2.5 mM Guanidine-HCl 12.5 mM NaCl 5 mM Acetate 2.5 mM MgCl ₂ 2.5 mM BSA	TE-buffer 10 mM MgCl ₂ 50 mM NaCl 10% EtOH 10% 2-Prop 50 mM NaAc 1 ug/uL Glycogen
Physical Specifications					
Analysis time	16 samples < 20 min 96 samples < 90 min	16 samples < 20 min 96 samples < 105 min	16 samples < 25 min 96 samples < 135 min	16 samples < 20 min 96 samples < 120 min	16 samples < 25 min 96 samples < 140 min
Samples per device	16	16	15	15	15
Sample volume required	1 µL	2 µL	1 µL	2 µL	1 µL
Kit stability	4 months	4 months	4 months	4 months	4 months
Kit size	112 samples	112 samples	105 samples	105 samples	105 samples
¹ Signal/noise ratio >3 for a single peak ³ Accuracy for electronic ladder: ± 20 % ⁵ Average result from various genomic DNA sample types			nic DNA sample types		

² Determined using the respective ladder as sample

³ Accuracy for electronic ladder: ± 20 %

⁴ Measured against 2200 TapeStation system

Average result from various genomic DNA sample types ⁶ DIN – DNA integrity number

DNA Application Notes

Publication Number	Description
5991-6892EN	Evaluating the Agilent 4200 TapeStation System for High Throughput Sequencing Quality Control
5991-7615EN	Use of the Agilent 4200 TapeStation System for Sample Quality Control in the Whole Exome Sequencing Workflow at the German Cancer Research Center (DKFZ)
5991-3722EN	Production and Analysis of High Molecular Weight Genomic DNA for NGS Pipelines Using Agilent DNA Extraction Kit
5991-1797EN	Analysis of high molecular weight genomic DNA using the Agilent 2200 TapeStation and Genomic DNA ScreenTape
5991-5360EN	The DNA Integrity Number (DIN) Provided by the Genomic DNA ScreenTape Assay Allows for Streamlining of NGS on FFPE Tissue Samples
5991-5259EN	Quality Control of Single Cell DNA Samples with the Agilent D5000 ScreenTape Assays for the Agilent 2200 TapeStation System

This list only provides an overview of selected DNA application notes.

Visit our website at www.agilent.com/genomics/tapestation for a complete list of all available application and technical notes.

Agilent 1	lechnologie
RNA Scree	enTape
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The RNA ScreenTape provides a fully automated, efficient and reliable RNA analysis for RNA characterization and quality assessment. The RNA integrity number equivalent (RIN^e) provides an instant and objective evaluation of total RNA degradation.

RNA Consumables and Reagents

Part Number	Description	Quantitiy
5067-5576	RNA ScreenTape For analysis of total RNA down to a sensitivity of 5 ng/μL. Includes 7 ScreenTape devices.	For 112 samples
5067-5577	RNA ScreenTape Sample Buffer For analysis of total RNA down to a sensitivity of 5 ng/μL. Includes 600 μL sample buffer. Order with 5067-5576.	For 112 samples
5067-5578	RNA ScreenTape Ladder For the analysis of total RNA down to a sensitivity of 5 ng/μL. Includes 10 μL ladder. Order with 5067-5576 and 5067-5577.	
5067-5579	High Sensitivity RNA ScreenTape For the high sensitivity analysis of total RNA down to 100 pg/µL. Includes 7 ScreenTape devices.	For 112 samples
5067-5580	High Sensitivity RNA ScreenTape Sample Buffer For the high sensitivity analysis of total RNA down to 100 pg/μL. Includes 250 μL sample buffer. Order with 5067-5579.	For 112 samples
5067-5581	High Sensitivity RNA ScreenTape Ladder For the high sensitivity analysis of total RNA down to 100 pg/μL. Includes 10 μL ladder. Order with 5067-5579 and 5067-5580.	

RNA Specifications

Analytical Specifications	RNA ScreenTape	High Sensitivity RNA ScreenTape
Quality score	RIN ^e	RIN ^e
Sensitivity ¹	5 ng/μL	100 pg/µL
RIN ^e functional range	25 – 500 ng/µL	1,000 — 25,000 pg/µL
Quantitative range	25 – 500 ng/µL	500 — 10,000 pg/μL
Quantitative precision	10 % CV	15 % CV
Quantitative accuracy ²	±20 %	±30 %
Analysis type	Eukaryotic or Prokaryotic total RNA QC	Eukaryotic or Prokaryotic total RNA QC
Maximum sample buffer strength	200 mM Tris, 20 mM EDTA, or 50 mM NaCl	10 mM Tris, 1 mM EDTA
Physical Specifications		
Analysis time	16 samples < 20 min 96 samples < 95 min	16 samples < 35 min 96 samples < 180 min
Samples per device	16	16
Sample volume required	1 µL	2 µL
Kit stability	4 months	4 months
Kit size	112 samples	112 samples

For total RNA samples.

 1 Signal/noise >3 in water and TE.

²Measured against 2200 TapeStation system.

RNA Application Notes

Publication Number	Description
5990-9613EN	Comparison of RIN and RIN ^e algorithms for the Agilent 2100 Bioanalyzer and the Agilent 2200 TapeStation system
5991-0023EN	RNA quality control using the Agilent 2200 TapeStation system – Assessment of the RIN ^e quality metric
5991-4116EN	Quality Control for SureSelect Strand-Specific RNA Library Preparation Using the Agilent 2200 TapeStation system
5991-4971EN	A Systematic Approach to Optimize Real-Time Quantitative RT-qPCR Experiments with the Agilent 2200 TapeStation system

This list only provides an overview of selected RNA application notes.

Visit our website at www.agilent.com/genomics/tapestation for a complete list of all available application and technical notes.

Part Number	Description	Quantity
5067-5155	Sample block (for tube strips)	1 block
5067-5156	Sample block (for 96-well plate)	1 block
5067-5158	Loading tip holder	1 holder
5067-5150	96-well sample plates	10 plates
5067-5154	96-well plate foil seal	100 foils
5067-5152	Loading tips (384 tips/pk)	10 packs
5067-5153	Loading tips (384 tips/pk)	1 pack
401428	Optical tube strips, 8x strip	1 box of 120
401425	Optical caps, 8x strip	1 box of 120
5067-5601	TapeStation Test Tape	1 test tape
G2960-60063	Needle Cartridge 2200 TapeStation System	1 cartridge

Agilent 2200 TapeStation Accessories and Spare Parts

Protein Consumables and Reagents for the Agilent 2200 TapeStation System

The P200 ScreenTape is an automated system for protein quality control from 10 to 200kDa allowing the determination of protein size, product purity and the comparision of different protein profiles.

Part Number	Description	Quantity
5067-5371	P200 ScreenTape For the analysis of proteins from 10 to 200 kDa. Includes 7 ScreenTape devices.	112 samples
5067-5372	P200 Reagents For the analysis of proteins from 10 to 200 kDa. Includes ladder, 5X Labeling dye, labeling buffer, reducing and non-reducing sample buffer, pH buffer and markers (pre-stained).	112 samples

Note: The Protein P200 ScreenTape assay is available only for the Agilent 2200 TapeStation system (G2964AA).

Protein Specifications

Analytical Specifications	P200 ScreenTape
Sizing range	10 to 200 kDa
Sizing resolution ¹	15 %
Sizing accuracy	± 10 % (CAII, lysozyme, BLG)
Sizing precision	3 % CV
Sensitivity ²	5 ng/µL (Iysozyme, BSA) 12.5 ng/µL (IgG)
Quantitative range	100—1,000 ng/µL (lgG)
Quantitative precision	15 % CV
Qualitative range	5— 5,000 ng/µL (BSA, lysozyme) 12.5—5,000 ng/µL (lgG)
Physical Specifications	
Analysis time	16 samples < 15 minutes
Samples per consumable	16
Sample volume required	2 μL
Kit stability	4 months
Kit size	112 samples



CAII = carbonic anhydrase, BLG = beta-lactoglobulin,

BSA = bovine serum albumin

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