Kits and Reagents for the Agilent 2100 Bioanalyzer

Agilent offers a broad range of analysis kits for the 2100 bioanalyzer.

- On-chip flow cytometry – the easy way to acquire dual-color, cell-based fluorescence data.
- RNA quality check – the industry standard for RNA analysis, offering total RNA and mRNA data with RNA Integrity Number (RIN), and Small RNA analysis.
- DNA size and quantity – smart, high resolution separation and quantification of DNA
- SDS-PAGE replacement for Protein analysis – the fast and reliable way to determine the quantity and purity of proteins from Coomassie down to silver stain sensitivity.

Cell Analysis Kits and Reagents

Order No.	Description
5067-1519	Cell Kit
5067-1520	Cell Checkout Kit

Physical Specifications	Cell Kit
Analysis run time	30 minutes
Number of samples	6
Sample volume	10 µL (recommended number of cells 2 x 10^4)
Kit stability	4 months
Kit size	60 samples/kit

RNA Analysis Kits and Reagents

Order No.	Description
5067-1511	RNA 6000 Nano Kit
5067-1512	RNA 6000 Nano Reagents
5067-1529	RNA Nano Ladder

Order No.	Description
5067-1513	RNA 6000 Pico Kit
5067-1514	RNA 6000 Pico Reagents
5067-1535	RNA Pico Ladder

Order No.	Description
5067-1548	Small RNA Kit
5067-1549	Small RNA Reagents
5067-1550	Small RNA Ladder

Analytical Specifications	RNA 6000 Nano Total RNA Assay	RNA 6000 Nano mRNA Assay	RNA 6000 Pico Total RNA Assay	RNA 6000 Pico mRNA Assay	Small RNA Assay
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**
Quantitation reproducibility	10 % CV (within a chip)	10 % CV (within a chip)	20 % CV (within a chip)	20 % CV (within a chip)	25 % CV (within a chip)
Quantitation accuracy*	20 % CV	20 % CV	30 % CV	30 % CV	
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 NaCl or 15 mM $MgCl_2$	50 mM Tris, 0.1 mM EDTA or 50 mM NaCl 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	4 months	4 months	4 months	4 months	4 months
Kit size	300 samples/kit	300 samples/kit	275 samples/kit	275 samples/kit	275 samples/kit

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

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DNA Analysis Kits and Reagents

Order No.	Description
5067-1504	DNA 1000 Kit
5067-1505	DNA 1000 Reagents

Order No.	Description
5067-1506	DNA 7500 Kit
5067-1507	DNA 7500 Reagents

Order No.	Description
5067-1508	DNA 12000 Kit
5067-1509	DNA 12000 Reagents

Order No.	Description
5067-4626	High Sensitivity DNA Kit
5067-4627	High Sensitivity DNA Reagents

Analytical Specifications	DNA 1000 Assay	DNA 7500 Assay	DNA 12000 Assay	High Sensitivity DNA Assay
Sizing range	25–1000 bp	100–7500 bp	100–12000 bp	50-7000 bp
Sizing resolution	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: 10 %	50-600 bp: ±10 % 600-7000 bp: ±20 %
Sizing accuracy	± 10 % CV*	± 10 % CV*	± 15 % CV*	± 10 % CV*
Sizing reproducibility	5 % CV*	5 % CV*	5 % CV*	5 % CV*
Quantitation accuracy	20 % CV*	20 % CV*	25 % CV*	20 % CV*
Quantitation reproducibility	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*	50-2000 bp: 15 % CV* 2000-7000 bp: 10 % CV*
Qualitative range	0.1–50 ng/µL*	0.1–50 ng/µL*	0.1–50 ng/µL*	5-500 pg/µL*
Maximum salt concentration in sample	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 $MgCl_2$	10 mM Tris and 1 mM EDTA
Physical Specifications				
Analysis time	35 minutes	30 minutes	30 minutes	45 minutes
Samples per chip	12	12	12	11
Sample volume	1 µL	1 µL	1 µL	1 µL
Kit stability	4 months	4 months	4 months	4 months
Kit size	300 samples/kit	300 samples/kit	300 samples/kit	110 samples/kit

* Determined analyzing the DNA ladder as sample

Protein Analysis Kits and Reagents

Order No.	Description
5067-1515	Protein 80 Kit
5067-1516	Protein 80 Reagents

Order No.	Description
5067-1517	Protein 230 Kit
5067-1518	Protein 230 Reagents

Order No.	Description
5067-1575	High Sensitivity Protein 250 Kit
5067-1576	High Sensitivity Protein 250 Reagents
5067-1577	High Sensitivity Protein 250 Labeling Reagents
5067-1578	High Sensitivity Protein 250 Ladder

Analytical Specifications	Protein 80 Assay	Protein 230 Assay	High Sensitivity Protein 250 Assay
Sizing range	5–80 kDa	14–230 kDa	10–250 kDa
Typical sizing resolution	10 %	10 %	10 %
Typical sizing accuracy	10 % CV (CAII, BLG)	10 % CV (BSA, CAII)	10 % CV (BSA)
Sizing reproducibility	3 % CV (CAII, BLG)	3 % CV (BSA, CAII)	3 % CV (BSA)
Sensitivity (signal/noise > 3)	6 ng/µL CAII (15 ng/µL BSA) in PBS 10 ng/µL (CAII) in 0.5 M NaCl (30 ng/µL BSA in 0.5 M NaCl)	6 ng/µL CAII (15 ng/µL BSA) in PBS 30 ng/µL (BSA) in 0.5 M NaCl	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, 30–2000 ng/µL BSA in PBS	Up to 4 orders of magnitude (0.3 to 3000 ng/µL BSA)
Qualitative range	6–4000 ng/µL CAII and BLG	6–5000 ng/µL CAII, 15–5000 ng/µL BSA in PBS	–
Quantitation 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	4 months	6 months
Kit size	250 samples/kit	250 samples/kit	100 samples/kit

CAII = Carbonic Anhydrase, BSA = Bovine Serum Albumin, BLG = beta-Lactoglobulin

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