



Agilent RNA ScreenTape and High Sensitivity RNA ScreenTape

Accelerate RNA analysis with the Agilent 4200 TapeStation

Data Sheet

Confidence in RNA quantity and quality

The Agilent 4200 TapeStation system offers automated sample processing of 1 to 96 samples for quick and reliable RNA and DNA sample quality control.

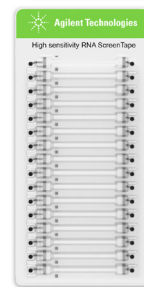
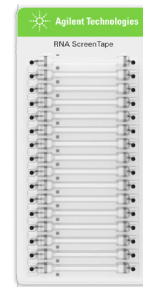
The RNA ScreenTape provide efficient and reliable analysis of total RNA samples from eukaryotic or prokaryotic origin providing quality, quantity and sizing information. The RNA integrity number equivalent (RIN^e) delivers an instant and objective evaluation of total RNA degradation. Depending on the sensitivity requirements of your application it is possible to choose between the RNA ScreenTape and the High Sensitivity RNA ScreenTape application.

RNA quality control has never been so easy – simply load the 4200 TapeStation instrument with the appropriate RNA ScreenTape device, loading tips, and your samples in tube strips or 96-well plates, and you will be reviewing results in as little as one minute per sample.

Key Features

Automated integrity assessment

Rely on the digital assessment of RNA integrity by using the RNA Integrity Number equivalent (RIN^e).



Easy to use

Simplify your sample quality control with ready-to-use ScreenTape consumables and reagents.

Zero carryover

Avoid sample carry over by running each RNA sample in a separate lane of the ScreenTape device.

Scalable throughput

Analyze any number of samples at constant price per sample.

Minimal sample consumption

Use no more than 2 μ L of your precious samples per run – even for high sensitivity analysis.

Fast results

Obtain results in as little as one minute per RNA sample independent of total sample number.

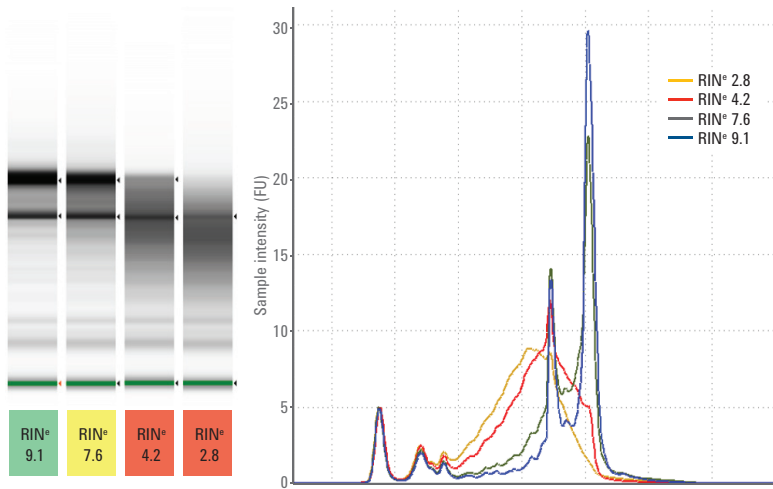
Complete solution for RNA analysis

- Agilent 4200 TapeStation system (G2991AA)
- Agilent RNA ScreenTape assay
 - * RNA ScreenTape (5067-5576)
 - * RNA ScreenTape Sample Buffer (5067-5577)
 - * Optional: RNA ScreenTape Ladder (5067-5578)
- Agilent High Sensitivity RNA assay
 - * High Sensitivity RNA ScreenTape (5067-5579)
 - * High Sensitivity RNA ScreenTape Sample Buffer (5067-5580)
 - * Optional: High Sensitivity RNA ScreenTape Ladder (5067-5581)



Agilent Technologies

RNA ScreenTape applications



Total RNA analysis with the RNA ScreenTape

Determining the quantity and quality of RNA is crucial for the success of any downstream experiment. For total RNA samples, the 4200 TapeStation software automatically calculates the RNA integrity number equivalent (RIN^e), an objective measurement of RNA degradation.

Four rat total RNA samples with different levels of RNA degradation were analyzed. The gel image, the electropherogram and the corresponding RIN^e values of the samples are shown.

Typical RNA ScreenTape applications

RNA quality control in gene expression workflows:

- Microarray analysis
- Next generation sequencing
- Quantitative RT-PCR

Analytical Specifications	Agilent RNA ScreenTape	Agilent 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	1000 – 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	Eukaryotic or Prokaryotic total RNA

Physical Specifications	Agilent RNA ScreenTape	Agilent High Sensitivity RNA ScreenTape
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.

² Measured against 2200 TapeStation.

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