Standardized Quality Control of Nucleic Acids

The New Agilent 4200 TapeStation as Ideal Tool for the Analysis of Biobanked RNA and DNA Samples

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Agilent
Trusted Answers

Agilent Automated Electrophoresis System Offering

Ease of use

Automation & Throughput

4200 TapeStation System

- **96 sample walk-away system**
- Ready-to-use ScreenTape Consumables
- Scalable throughput 1-96 samples
- Genomic DNA analysis (DIN)
- RNA Integrity Number equivalent (RIN^{e})

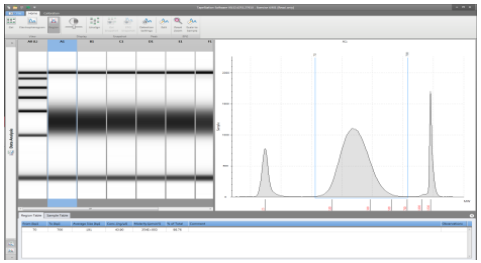
2100 Bioanalyzer system

Widely accepted system for NGS sample and RNA QC

Agilent 4200 TapeStation System – Ease of Use

ScreenTape Consumable

4200 TapeStation Instrument



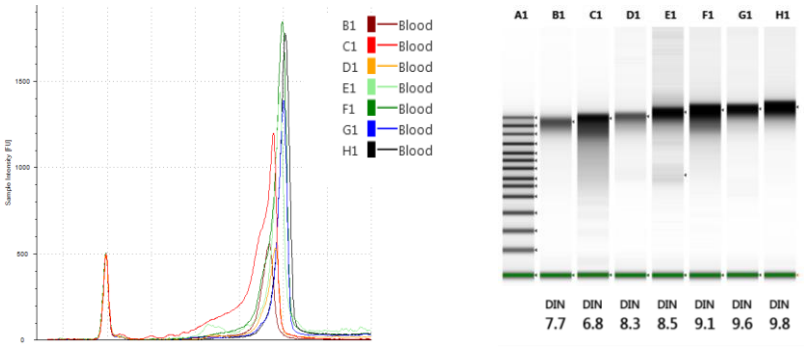
TapeStation Software

1. Place ScreenTape and some tips in the TapeStation

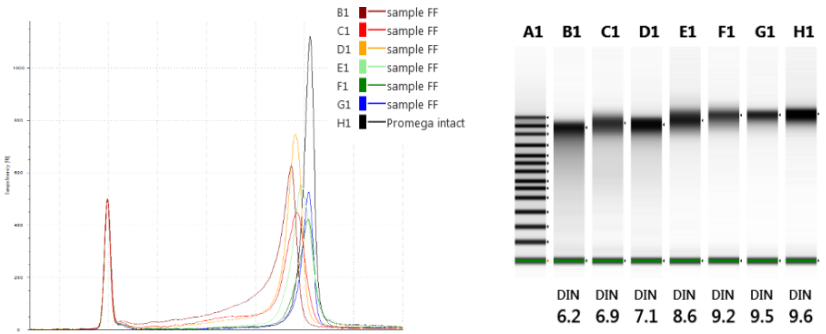
2. Place your prepared samples in the TapeStation and press ‘Start’ on the instrument controller software

3. View your analysed results in around 1-2 min per sample

Analysis of genomic DNA: DNA Integrity Number (DIN)
Examples

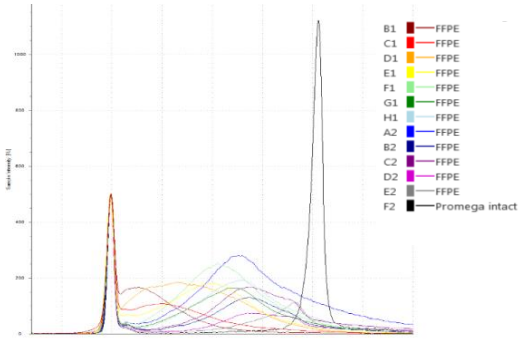


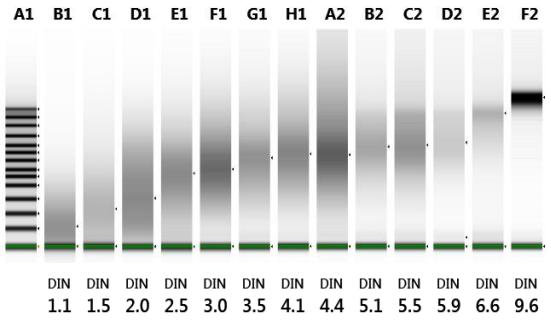
Blood



Fresh Frozen Tissue

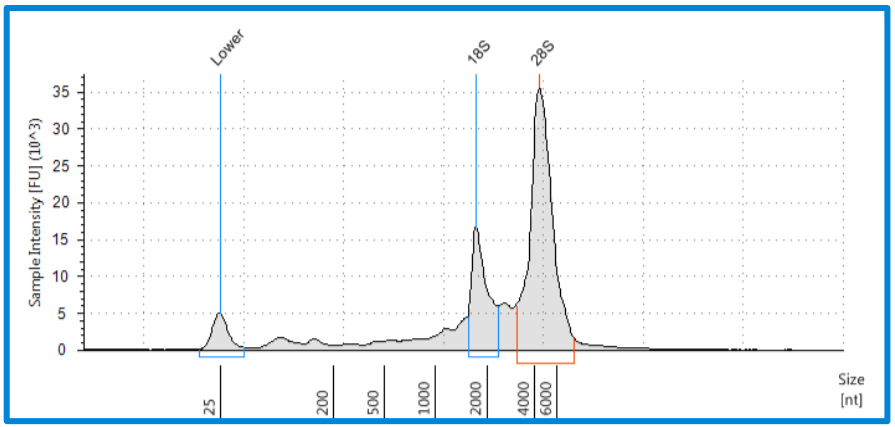
FFPE

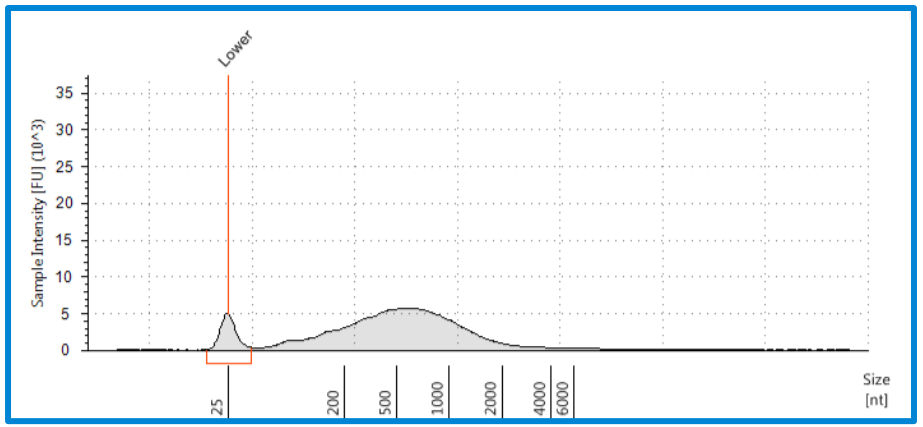




Agilent RNA ScreenTape Quality Metric

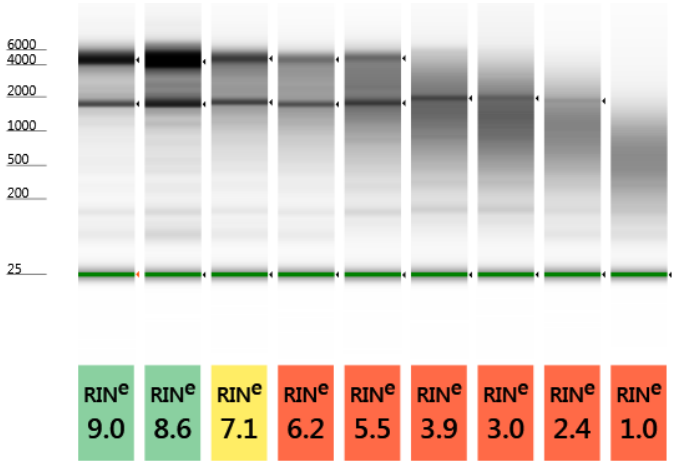
RNA Integrity Number equivalent (RIN^e)





High Quality RNA

- Visible 18S and 28S ribosomal Peak
- High RNA Integrity number (RIN^e 1-10)



Degraded RNA

- Small or no ribosomal Peaks
- Low RNA Integrity number (RIN^e 1-10)

4200 TapeStation Key Features and Benefits

- ✓ **Ease-of-Use:** pre-prepared consumables
- ✓ **Automation:** fully automated sample processing from 1 to 96 samples
- ✓ **Scalable throughput:** any sample number from 1 to 96 samples
- ✓ **Flexible:** easy to switch between assays, 96-well plate and 8x PCR strips are compatible
- ✓ **Fast results:** 1 sample in about 1-2 min; 96 well plate <90 min
- ✓ **Low hands-on time:** ready-to-use ScreenTape devices and automated sample loading
- ✓ **Constant cost / sample:** partially used ScreenTape devices are good to use for two weeks
- ✓**Standardization:** DIN and RIN^e as quality metrics
- ✓ **Low sample volume:** 1 µl, or max 2 µl of sample required
- ✓ **Zero carry-over:** discrete ScreenTape lanes and disposable pipette tips
- ✓ **No evaporation:** sample plates can be covered with foil