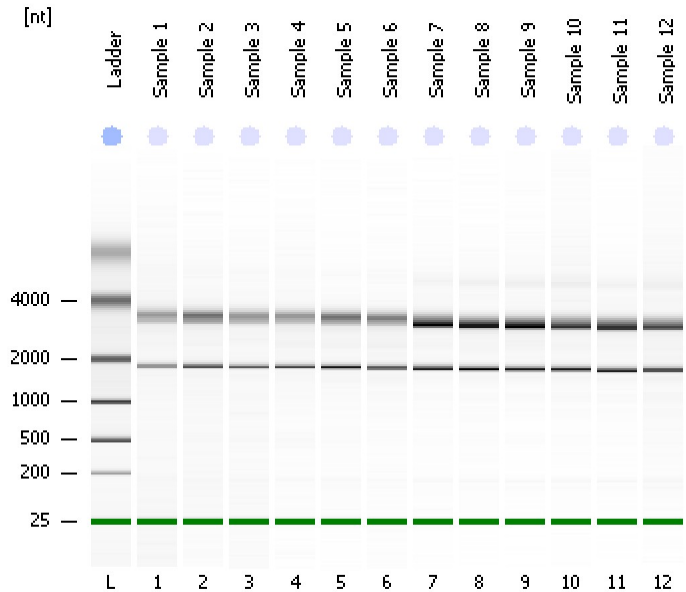


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

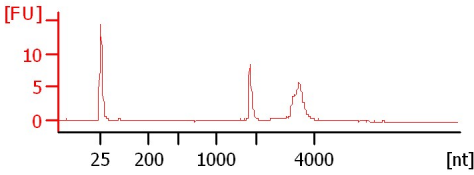
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Nano Series II.xsy
Assay Class: Eukaryote Total RNA Nano
Version: 2.6
Assay Comments: Total RNA Analysis ng sensitivity (Eukaryote)
© Copyright 2003 - 2009 Agilent Technologies, Inc.

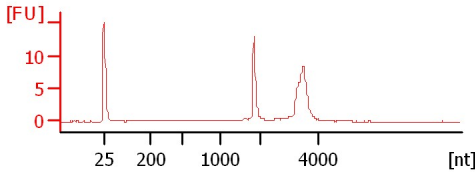
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

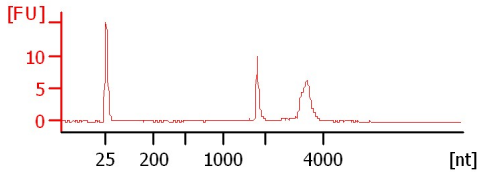
Sample 1
RIN:10



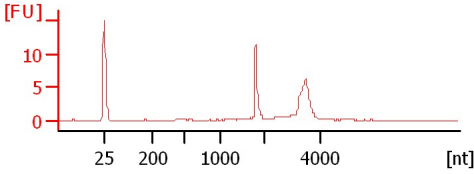
Sample 2
RIN: 9.70



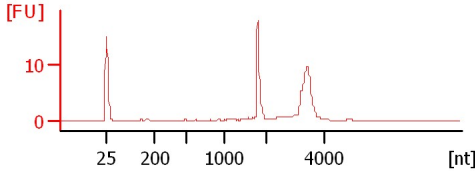
Sample 3
RIN: 9.60



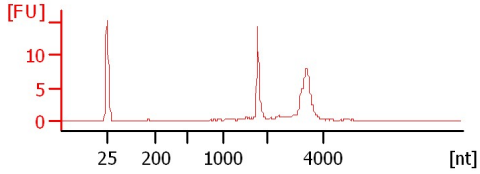
Sample 4
RIN: 9.30



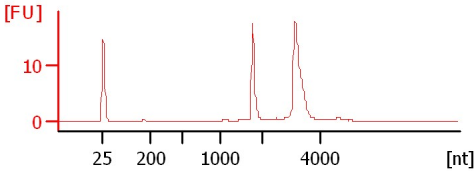
Sample 5
RIN: 9.60



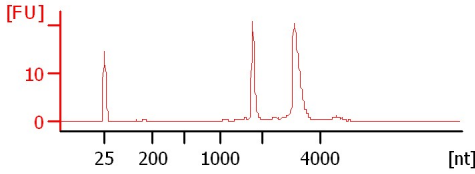
Sample 6
RIN: 9.70



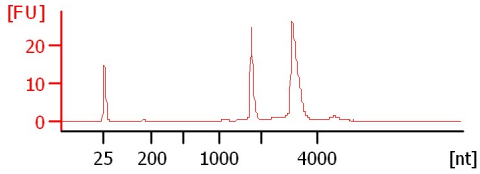
Sample 7
RIN:10



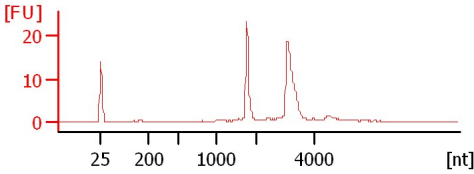
Sample 8
RIN: 9.90



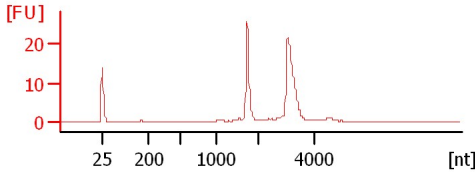
Sample 9
RIN:10



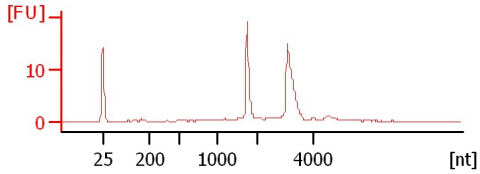
Sample 10
RIN: 9.90



Sample 11
RIN: 9.90



Sample 12
RIN: 9.50



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
 Modified: 7/23/2019 1:58:55 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|----------------|--------|-------------------|--------------|
| Sample 1 | | ✓ | RIN:10 | |
| Sample 2 | | ✓ | RIN: 9.70 | |
| Sample 3 | | ✓ | RIN: 9.60 | |
| Sample 4 | | ✓ | RIN: 9.30 | |
| Sample 5 | | ✓ | RIN: 9.60 | |
| Sample 6 | | ✓ | RIN: 9.70 | |
| Sample 7 | | ✓ | RIN:10 | |
| Sample 8 | | ✓ | RIN: 9.90 | |
| Sample 9 | | ✓ | RIN:10 | |
| Sample 10 | | ✓ | RIN: 9.90 | |
| Sample 11 | | ✓ | RIN: 9.90 | |
| Sample 12 | | ✓ | RIN: 9.50 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 13
Minimum Visible Range [s] : 17
Maximum Visible Range [s] : 70
Start Analysis Time Range [s] : 19
End Analysis Time Range [s] : 69
Ladder Concentration [ng/ μ l] : 150
Lower Marker Concentration [ng/ μ l] : 0
Upper Marker Concentration [ng/ μ l] : 0
Used Lower Marker for Quantitation
Standard Curve Fit is Logarithmic
Show Data Aligned to Lower Marker

Integrator Settings

Integration Start Time [s] : 19
Integration End Time [s] : 69
Slope Threshold : 0.6
Height Threshold [FU] : 0.5
Area Threshold : 0.2
Width Threshold [s] : 0.5
Baseline Plateau [s] : 6

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

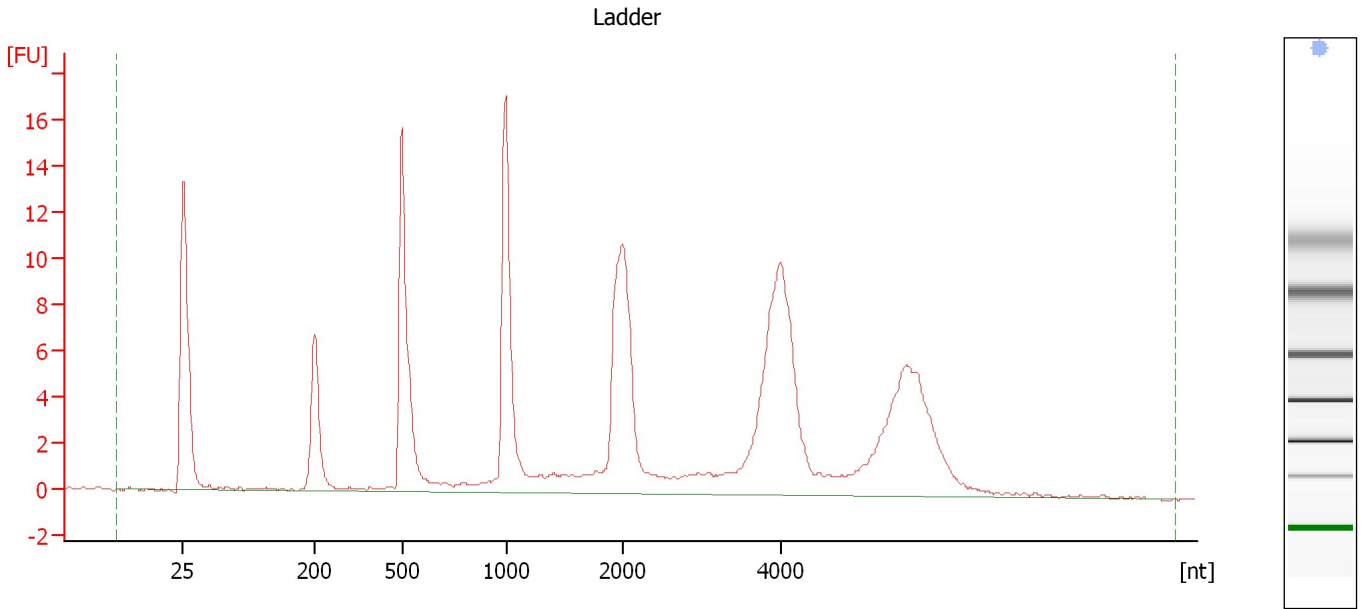
Ladder

| Ladder Peak | Size |
|-------------|------|
| 1 | 25 |
| 2 | 200 |
| 3 | 500 |
| 4 | 1000 |
| 5 | 2000 |
| 6 | 4000 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary



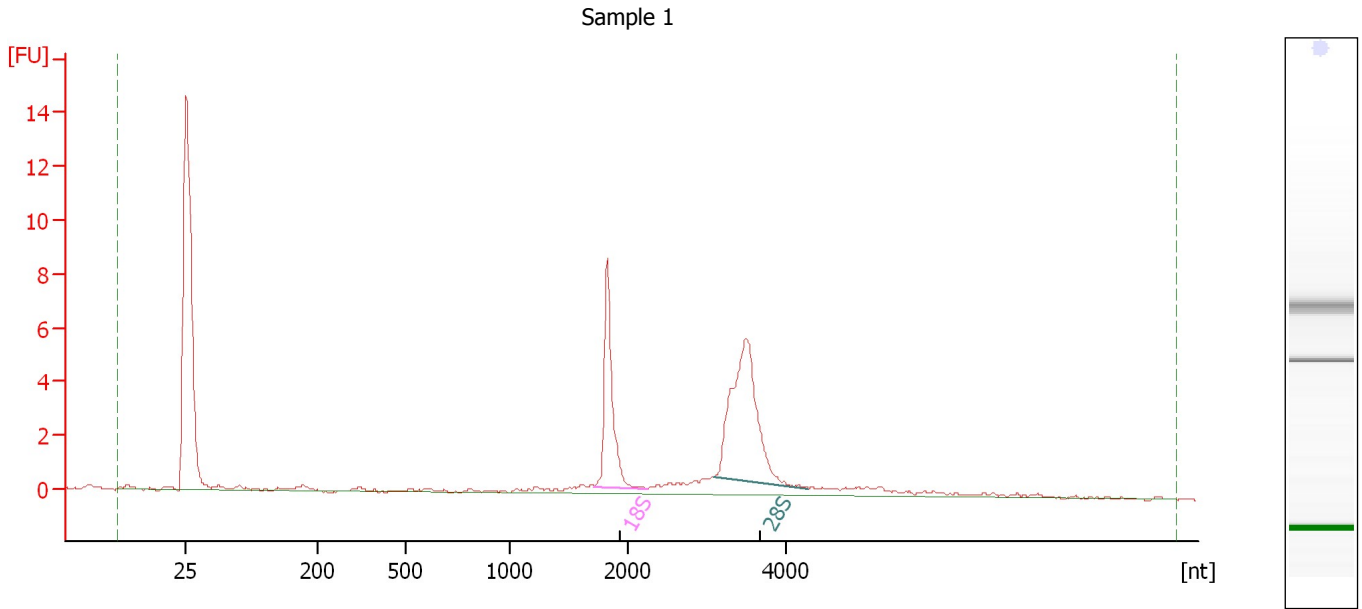
Overall Results for Ladder

| | | | |
|--------------------|-----------|------------------------|---|
| RNA Area: | 163.6 | Result Flagging Color: | |
| RNA Concentration: | 150 ng/μl | Result Flagging Label: | All Other Samples |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Sample 1

RNA Area: 41.1 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 38 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN:10

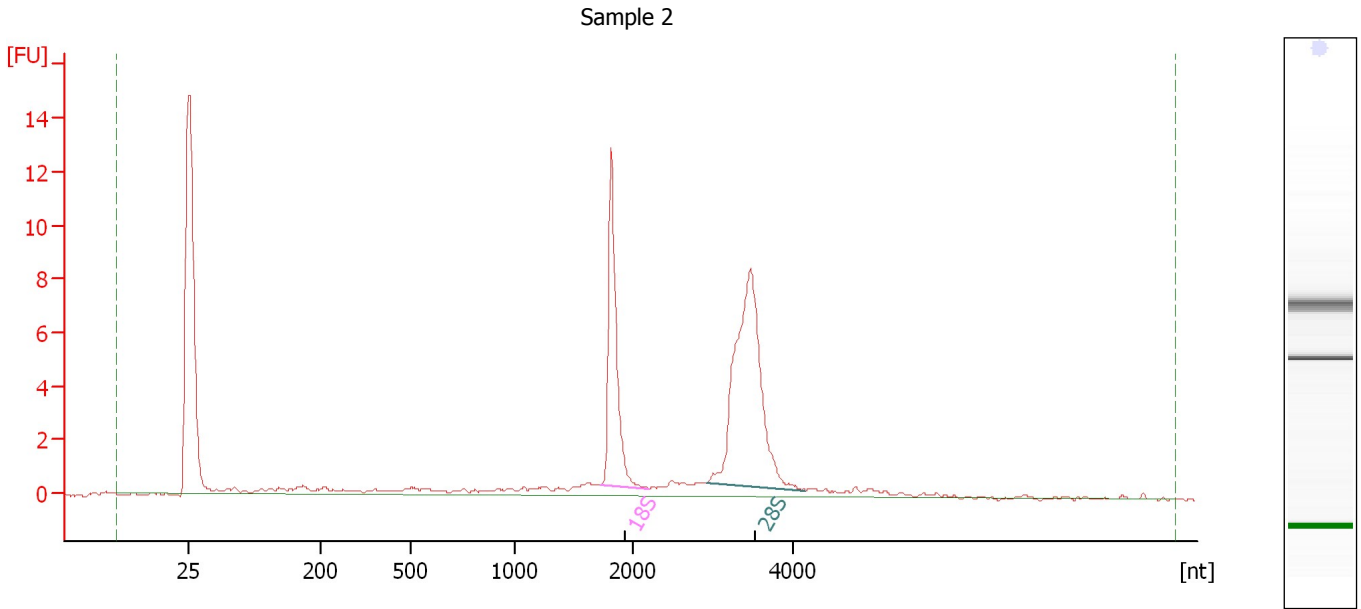
Fragment table for sample 1 : Sample 1

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,718 | 2,244 | 8.6 | 21.0 |
| 28S | 3,078 | 4,276 | 14.9 | 36.3 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Sample 2

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 57.5 | RNA Integrity Number (RIN): | 9.7 (B.02.08) |
| RNA Concentration: | 53 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.9 | Result Flagging Label: | RIN: 9.70 |

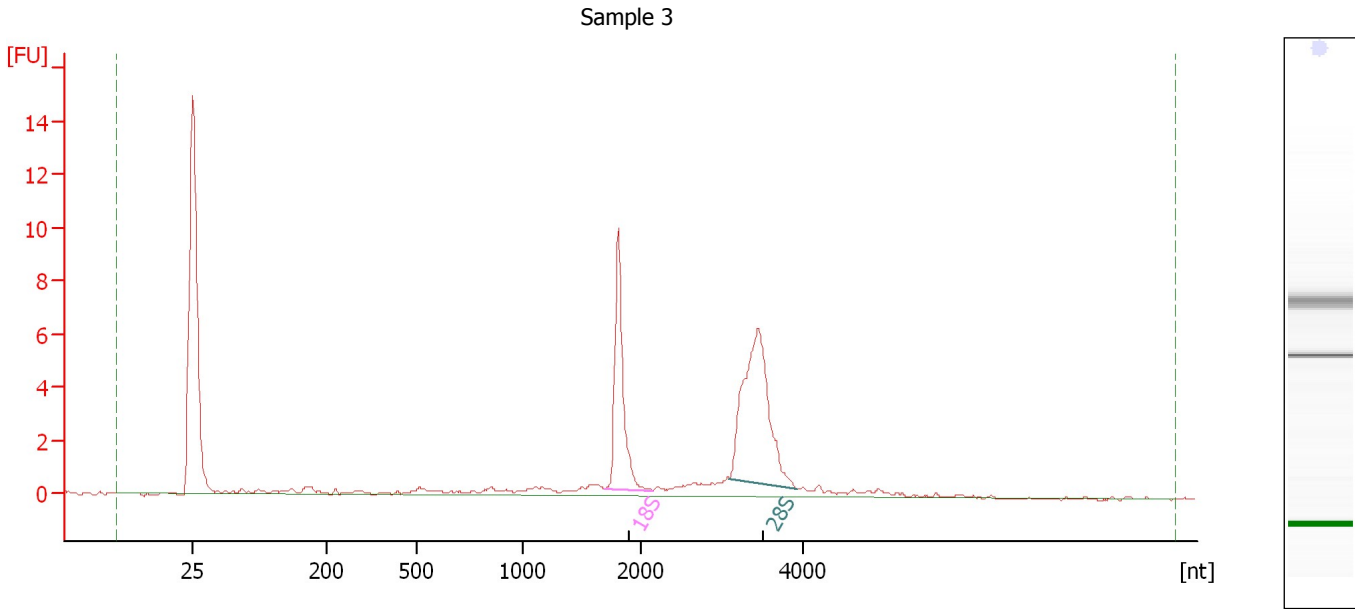
Fragment table for sample 2 : Sample 2

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,722 | 2,206 | 12.2 | 21.2 |
| 28S | 2,928 | 4,157 | 23.1 | 40.1 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Sample 3

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 44.8 | RNA Integrity Number (RIN): | 9.6 (B.02.08) |
| RNA Concentration: | 41 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.7 | Result Flagging Label: | RIN: 9.60 |

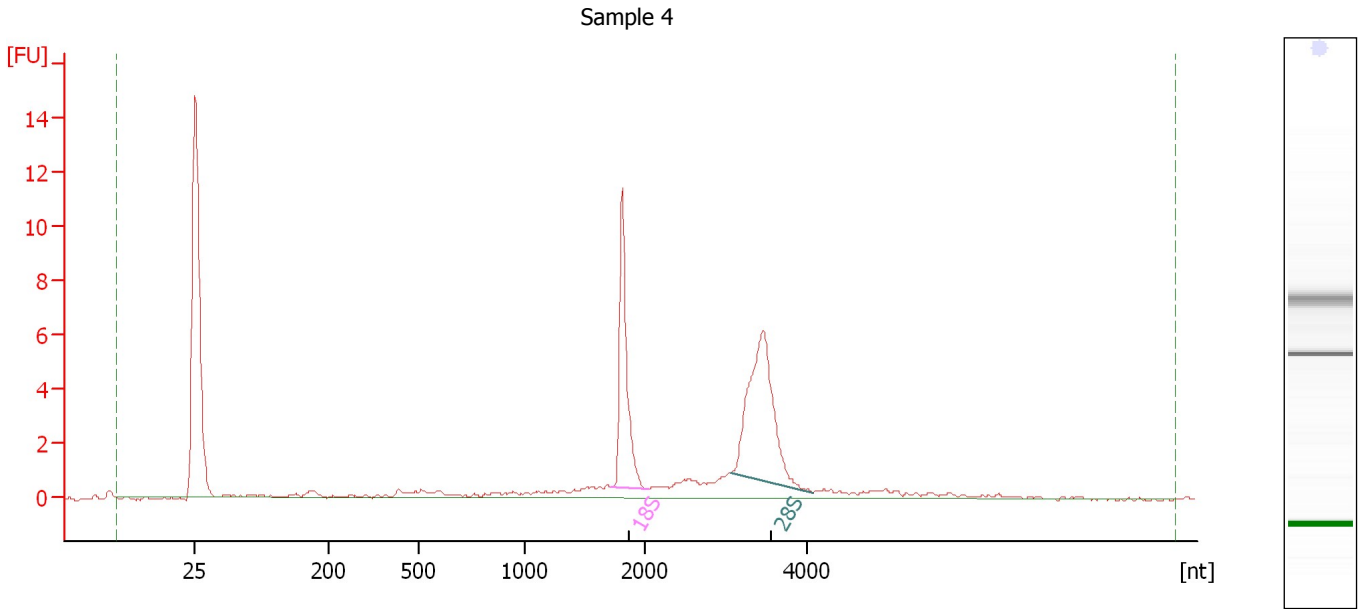
Fragment table for sample 3 : Sample 3

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,692 | 2,156 | 9.7 | 21.8 |
| 28S | 3,097 | 3,945 | 16.1 | 36.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Sample 4

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 47.1 | RNA Integrity Number (RIN): | 9.3 (B.02.08) |
| RNA Concentration: | 43 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.5 | Result Flagging Label: | RIN: 9.30 |

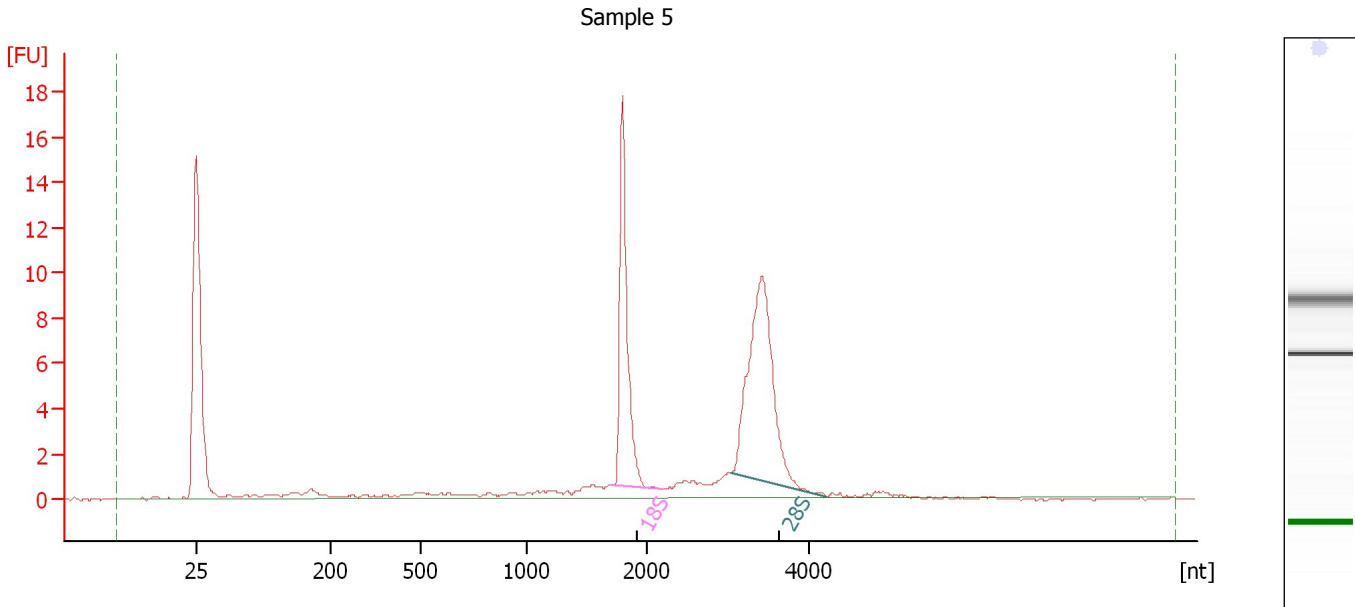
Fragment table for sample 4 : Sample 4

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,722 | 2,039 | 10.1 | 21.5 |
| 28S | 3,068 | 4,084 | 14.7 | 31.2 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Sample 5

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 63.5 | RNA Integrity Number (RIN): | 9.6 (B.02.08) |
| RNA Concentration: | 58 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.5 | Result Flagging Label: | RIN: 9.60 |

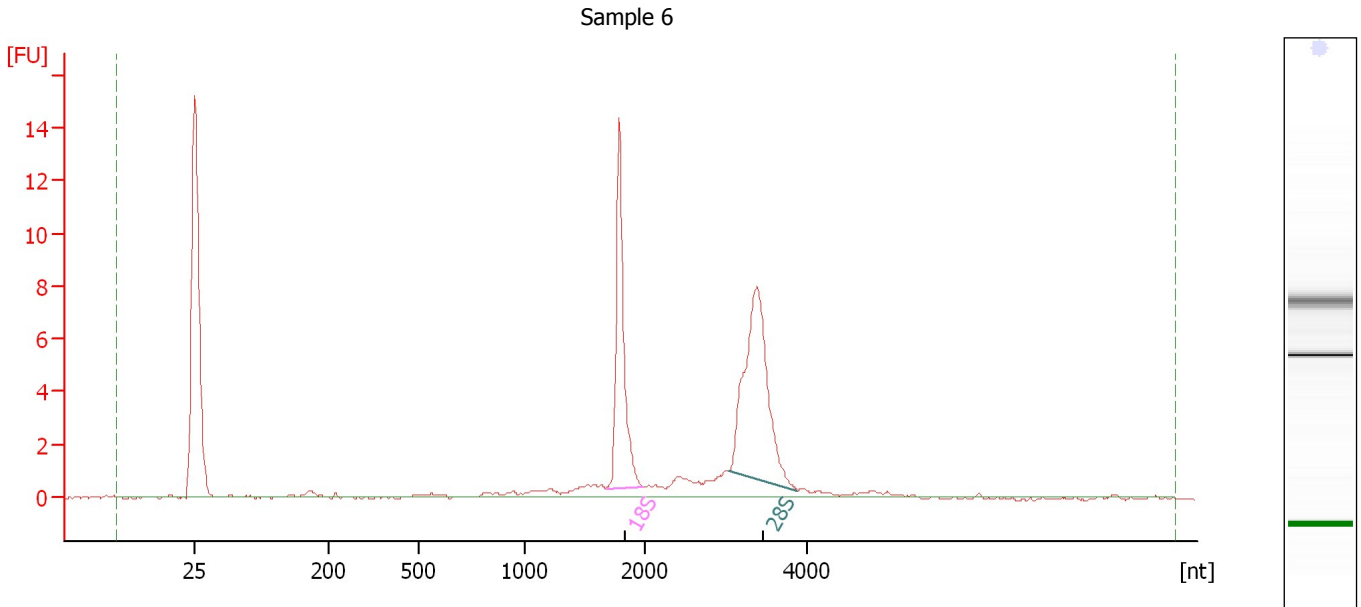
Fragment table for sample 5 : Sample 5

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,705 | 2,185 | 16.2 | 25.5 |
| 28S | 3,041 | 4,212 | 23.8 | 37.4 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Sample 6

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 49.8 | RNA Integrity Number (RIN): | 9.7 (B.02.08) |
| RNA Concentration: | 46 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.4 | Result Flagging Label: | RIN: 9.70 |

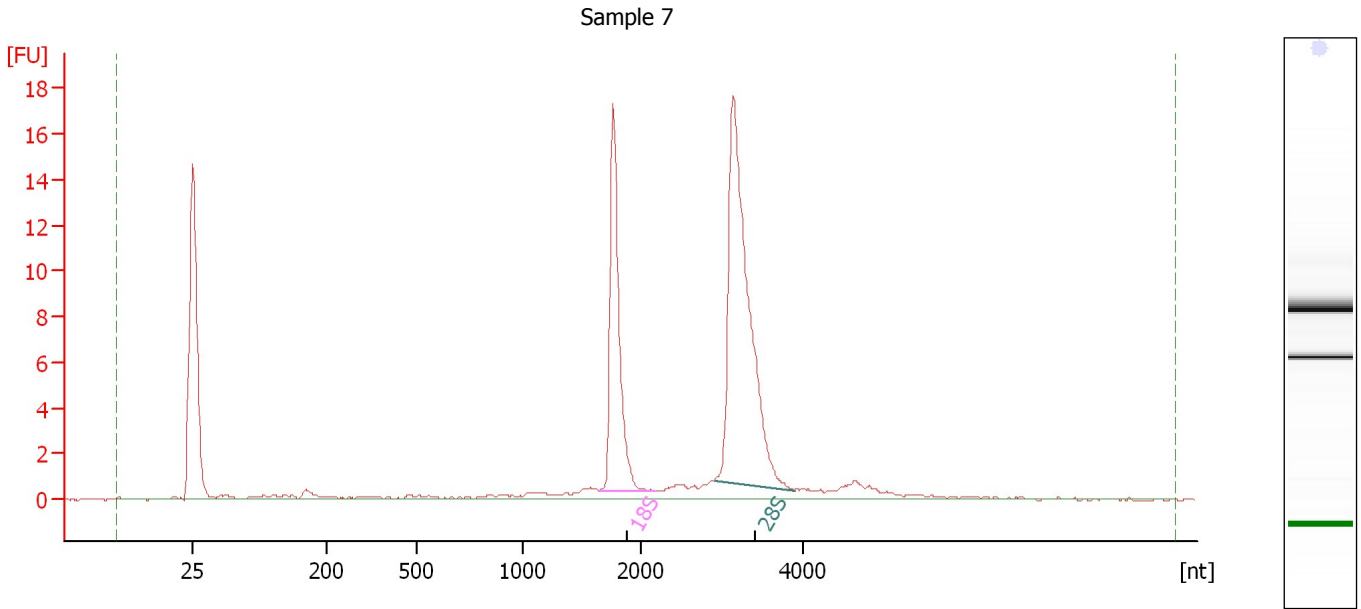
Fragment table for sample 6 : Sample 6

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,677 | 1,991 | 13.0 | 26.2 |
| 28S | 3,028 | 3,886 | 18.5 | 37.1 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Sample 7

RNA Area: 77.5 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 71 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 2.0 Result Flagging Label: RIN:10

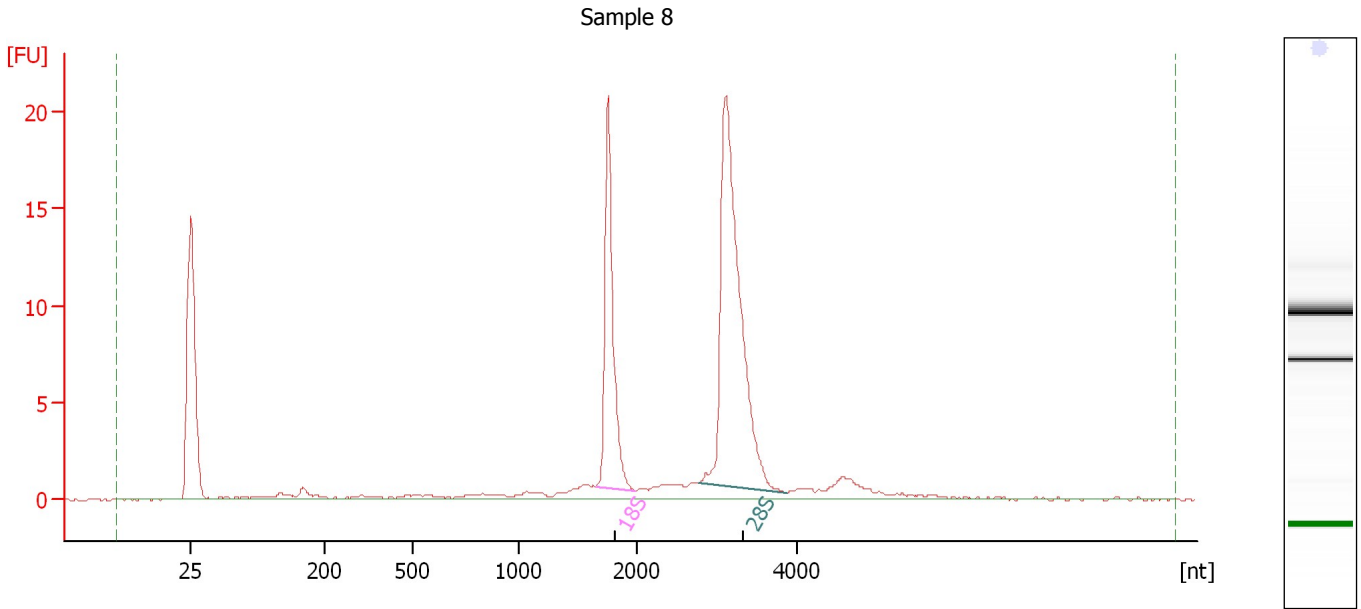
Fragment table for sample 7 : Sample 7

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,647 | 2,183 | 18.4 | 23.7 |
| 28S | 2,911 | 3,905 | 37.2 | 48.1 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Sample 8

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 92.5 | RNA Integrity Number (RIN): | 9.9 (B.02.08) |
| RNA Concentration: | 85 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 2.0 | Result Flagging Label: | RIN: 9.90 |

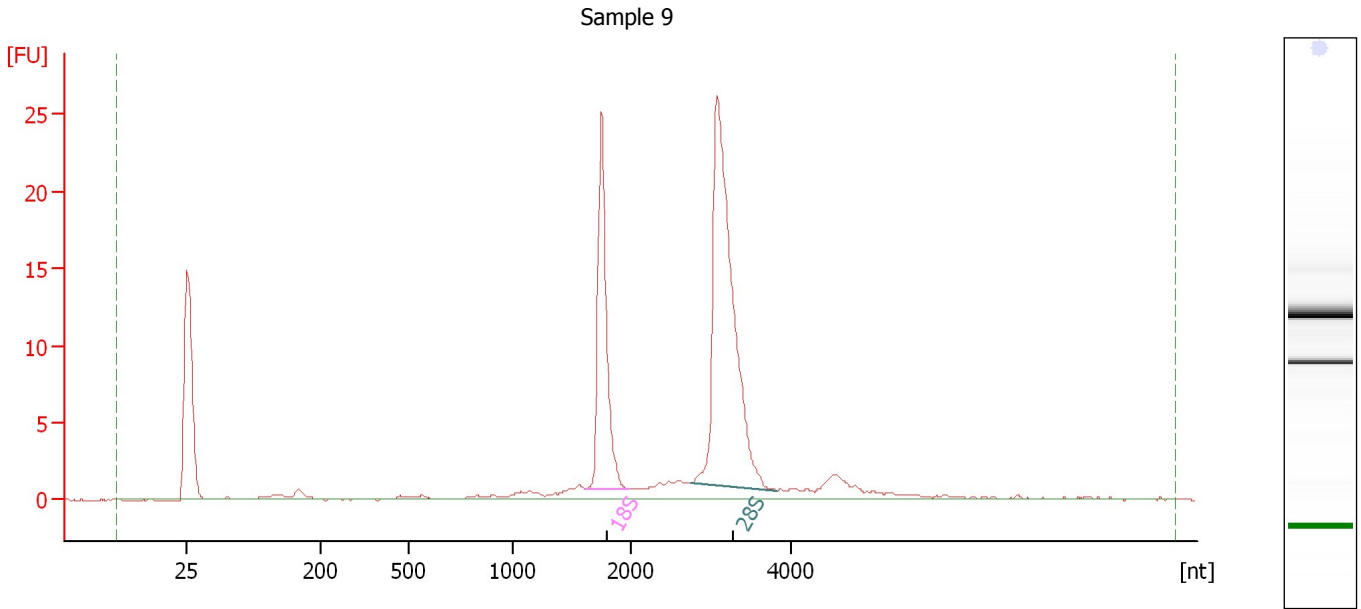
Fragment table for sample 8 : Sample 8

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,662 | 1,978 | 20.8 | 22.5 |
| 28S | 2,780 | 3,871 | 42.4 | 45.8 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Sample 9

RNA Area: 114.0 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 105 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 2.1 Result Flagging Label: RIN:10

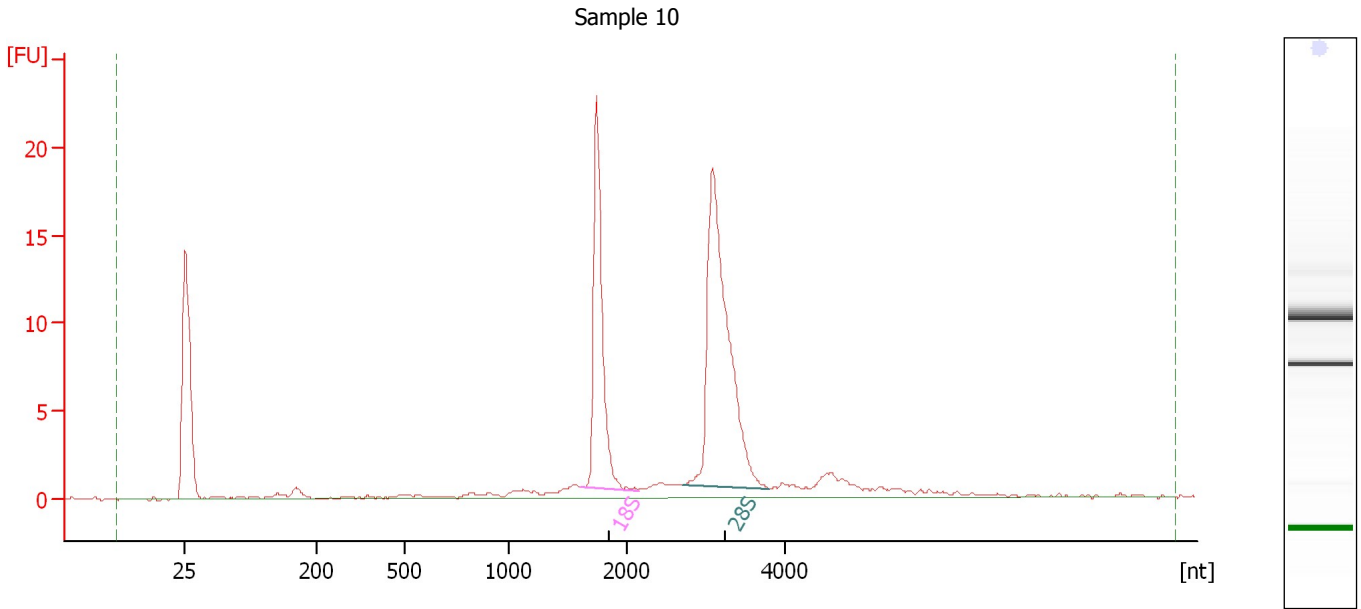
Fragment table for sample 9 : Sample 9

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,612 | 1,985 | 26.1 | 22.9 |
| 28S | 2,754 | 3,826 | 56.1 | 49.2 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Sample 10

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 96.9 | RNA Integrity Number (RIN): | 9.9 (B.02.08) |
| RNA Concentration: | 89 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.8 | Result Flagging Label: | RIN: 9.90 |

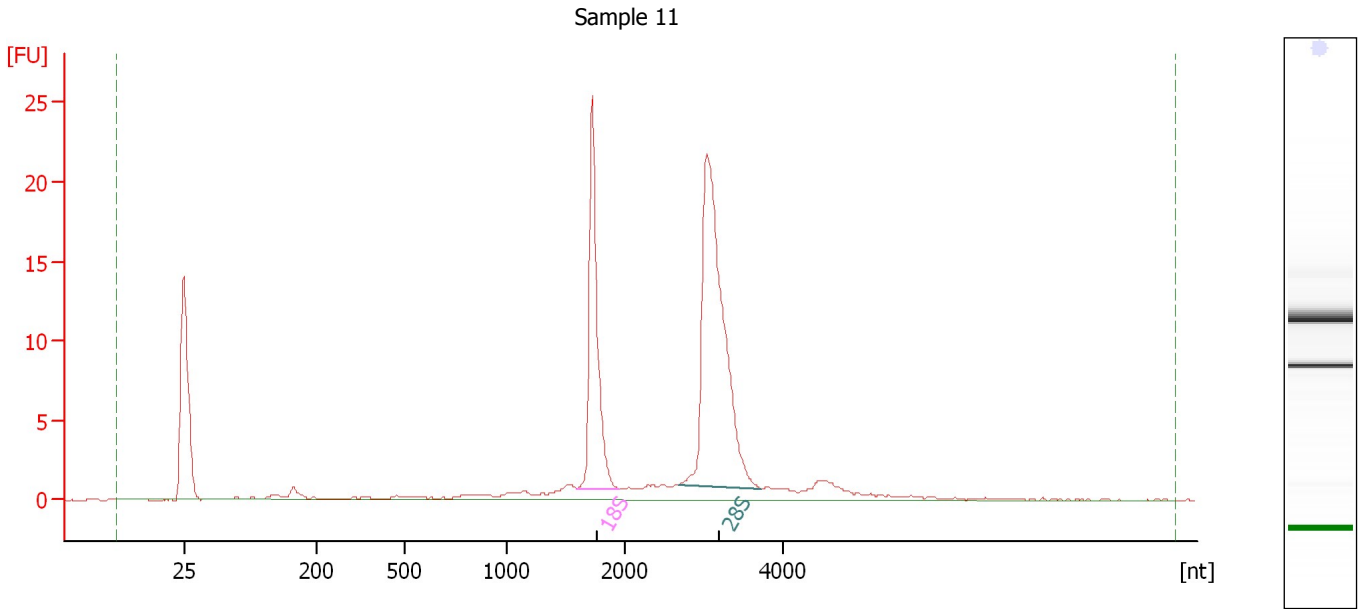
Fragment table for sample 10 : Sample 10

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,608 | 2,150 | 23.4 | 24.2 |
| 28S | 2,715 | 3,805 | 41.5 | 42.9 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Sample 11

RNA Area: 111.1 RNA Integrity Number (RIN): 9.9 (B.02.08)
RNA Concentration: 102 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.9 Result Flagging Label: RIN: 9.90

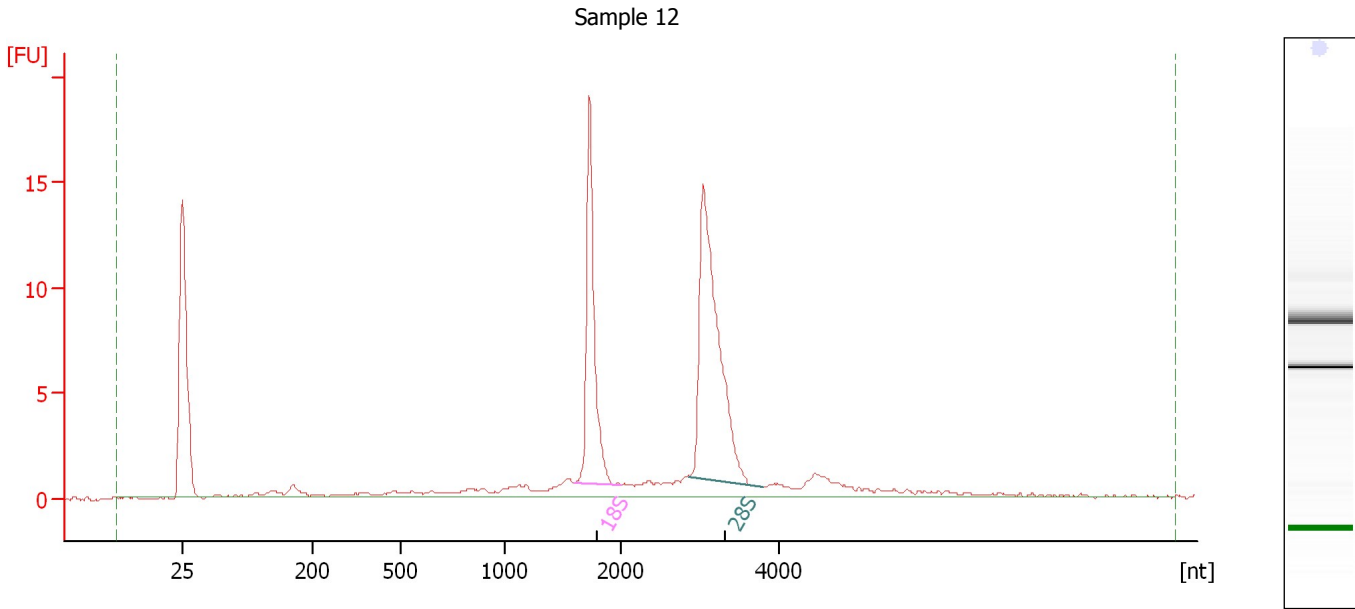
Fragment table for sample 11 : Sample 11

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,598 | 1,955 | 25.7 | 23.1 |
| 28S | 2,688 | 3,727 | 50.0 | 45.0 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
 Modified: 7/23/2019 1:58:55 PM

Electropherogram Summary Continued ...



Overall Results for sample 12 : Sample 12

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 82.6 | RNA Integrity Number (RIN): | 9.5 (B.02.08) |
| RNA Concentration: | 76 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.6 | Result Flagging Label: | RIN: 9.50 |

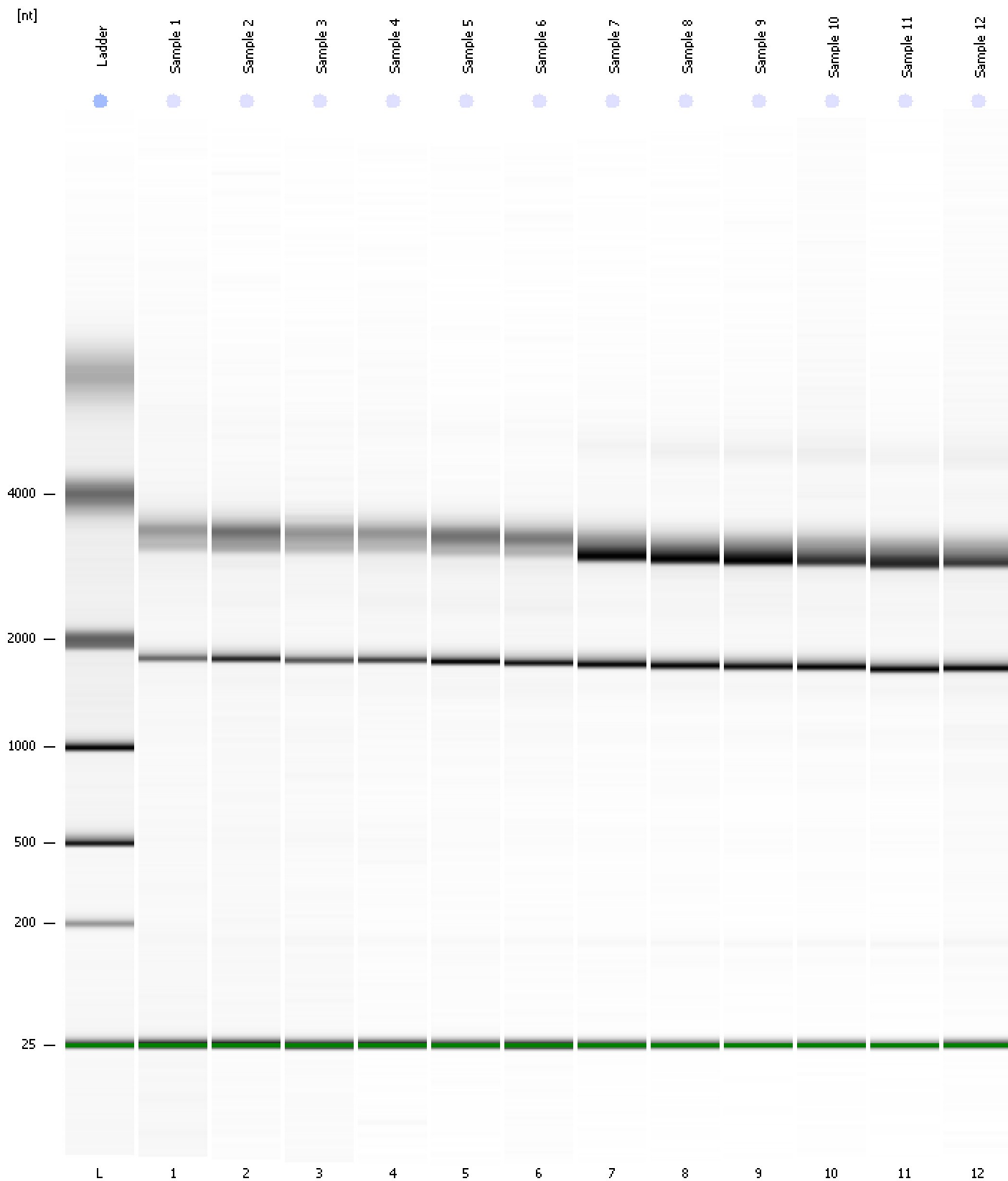
Fragment table for sample 12 : Sample 12

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,612 | 2,012 | 18.6 | 22.5 |
| 28S | 2,879 | 3,800 | 29.8 | 36.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
Modified: 7/23/2019 1:58:55 PM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad

Created: 7/23/2019 1:35:04 PM
 Modified: 7/23/2019 1:58:55 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|--|--------|------------|----------|--------------|----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 13) | | Instrument | Run | | 7/23/2019 1:58:54 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-07-23\2019-07-23_002.xad) | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938C | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE34903152 | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 7/23/2019 1:35:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |