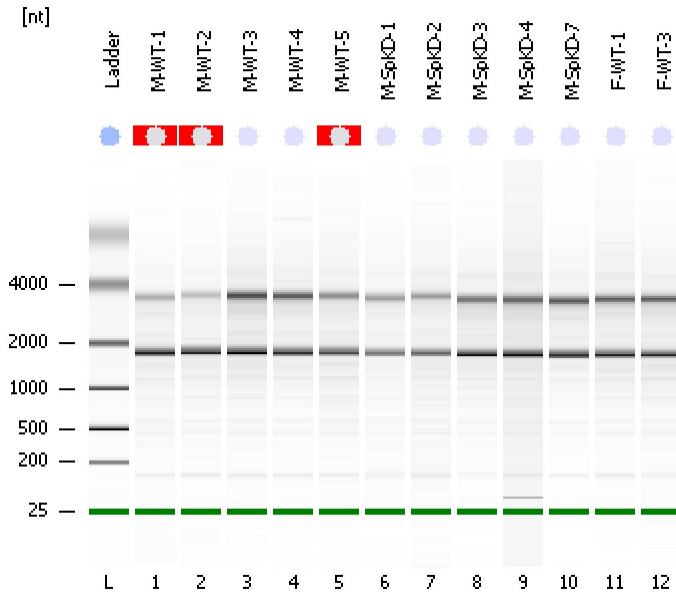


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electrophoresis File Run Summary



Instrument Information:

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

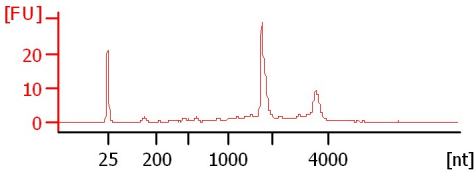
Assay Information:

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.

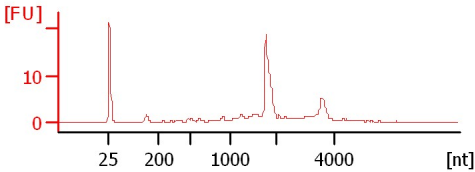
Chip Information:

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

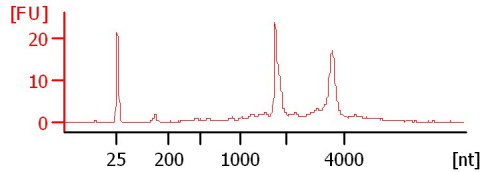
HiSeq2000 RIN N/A **M-WT-1**



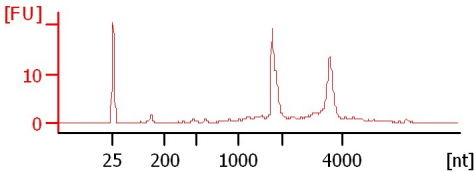
HiSeq2000 RIN N/A **M-WT-2**



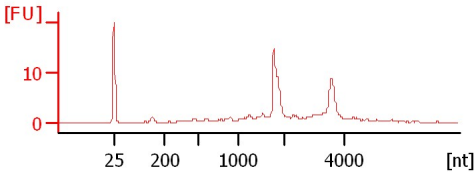
HiSeq2000 RIN: 8.50 **M-WT-3**



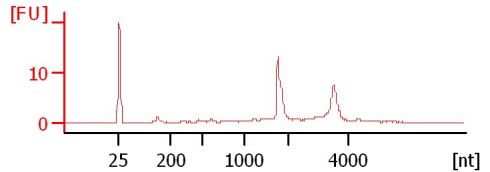
HiSeq2000 RIN: 9 **M-WT-4**



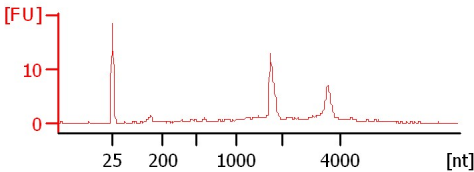
HiSeq2000 RIN N/A **M-WT-5**



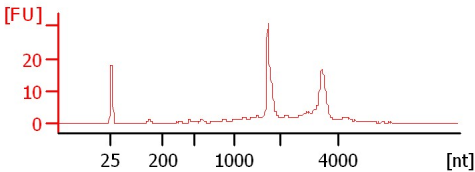
HiSeq2000 RIN: 8.60 **M-SpKD-1**



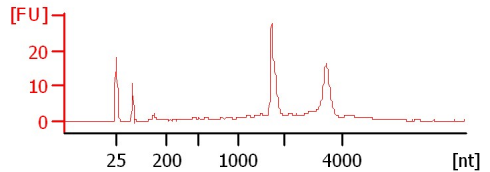
HiSeq2000 RIN: 8 **M-SpKD-2**



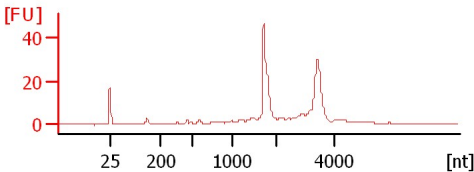
HiSeq2000 RIN: 8.30 **M-SpKD-3**



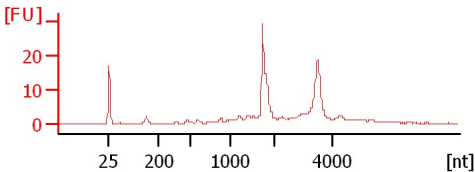
HiSeq2000 RIN: 8.80 **M-SpKD-4**



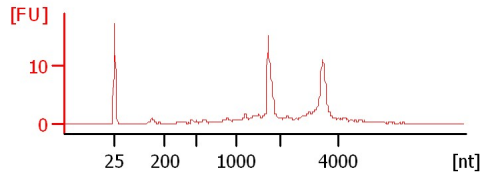
HiSeq2000 RIN: 8.80 **M-SpKD-7**



HiSeq2000 RIN: 8.50 **F-WT-1**



HiSeq2000 RIN: 8.40 **F-WT-3**



Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|----------------|--------|-------------------|--------------|
| M-WT-1 | HiSeq2000 | ✓ | RIN N/A | |
| M-WT-2 | HiSeq2000 | ✓ | RIN N/A | |
| M-WT-3 | HiSeq2000 | ✓ | RIN: 8.50 | |
| M-WT-4 | HiSeq2000 | ✓ | RIN:9 | |
| M-WT-5 | HiSeq2000 | ✓ | RIN N/A | |
| M-SpKD-1 | HiSeq2000 | ✓ | RIN: 8.60 | |
| M-SpKD-2 | HiSeq2000 | ✓ | RIN:8 | |
| M-SpKD-3 | HiSeq2000 | ✓ | RIN: 8.30 | |
| M-SpKD-4 | HiSeq2000 | ✓ | RIN: 8.80 | |
| M-SpKD-7 | HiSeq2000 | ✓ | RIN: 8.80 | |
| F-WT-1 | HiSeq2000 | ✓ | RIN: 8.50 | |
| F-WT-3 | HiSeq2000 | ✓ | RIN: 8.40 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 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

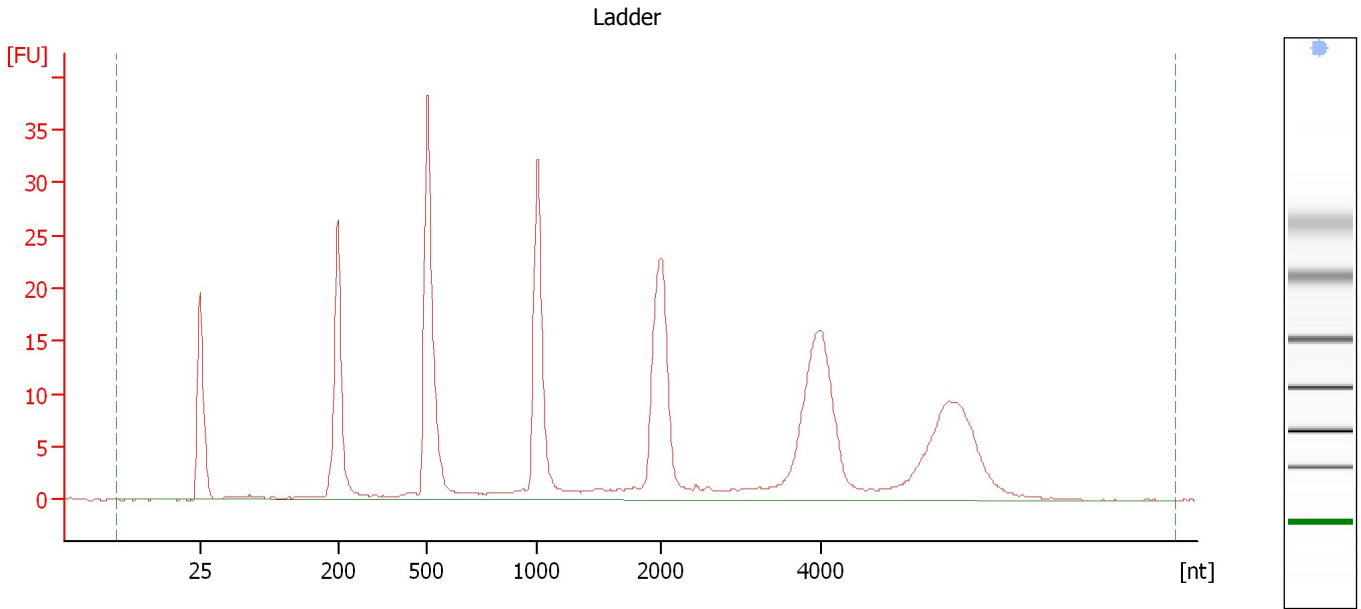
Ladder

| 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\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary



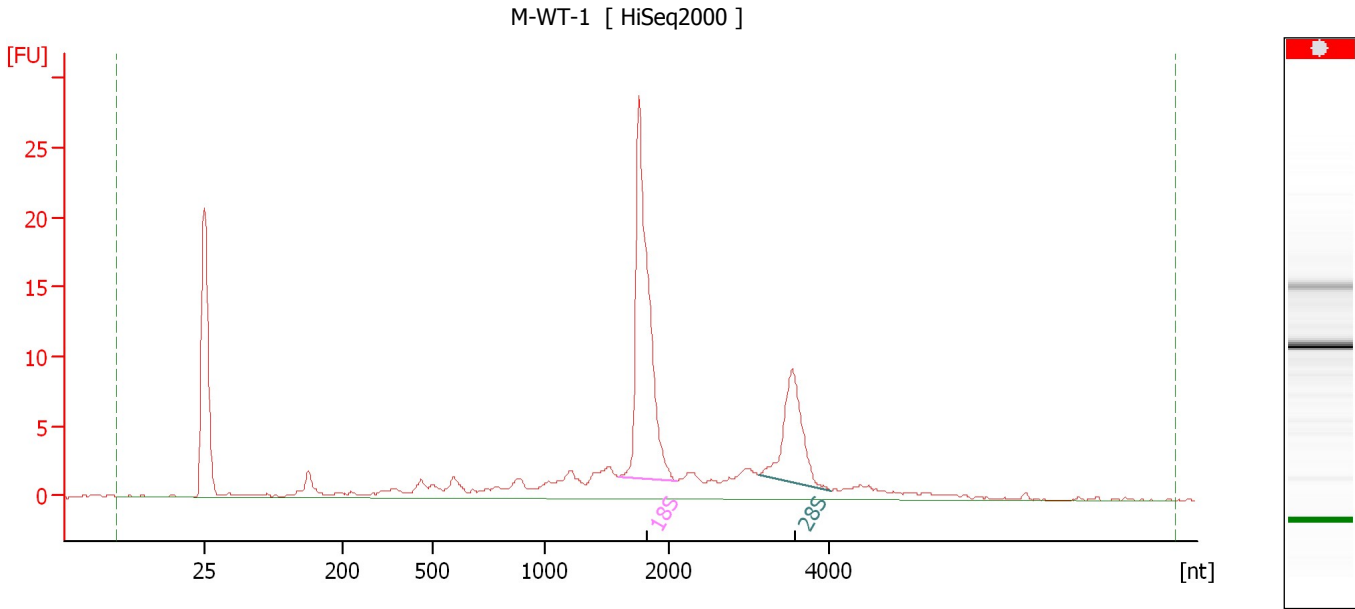
Overall Results for Ladder

| | | | |
|--------------------|-----------|------------------------|---|
| RNA Area: | 299.4 | 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\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : M-WT-1

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 132.5 | RNA Integrity Number (RIN): | N/A (B.02.08) |
| RNA Concentration: | 66 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.4 | Result Flagging Label: | RIN N/A |

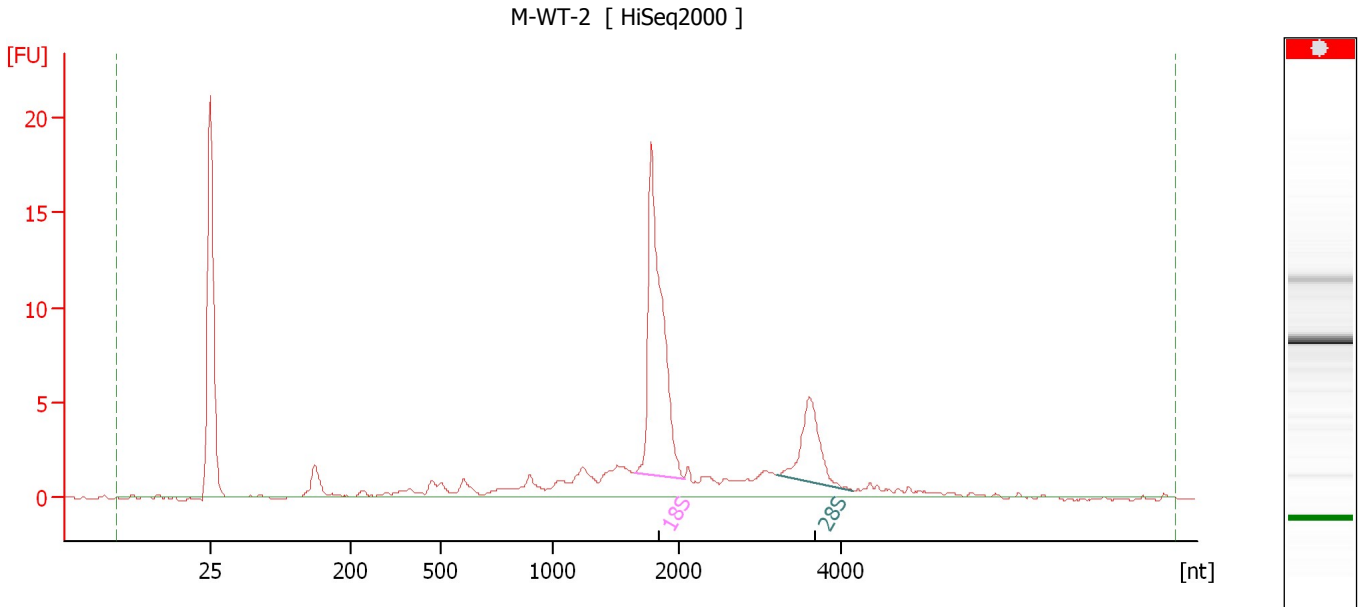
Fragment table for sample 1 : M-WT-1

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,592 | 2,097 | 42.1 | 31.8 |
| 28S | 3,108 | 4,013 | 16.1 | 12.2 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
 Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : M-WT-2

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 86.1 | RNA Integrity Number (RIN): | N/A (B.02.08) |
| RNA Concentration: | 43 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.3 | Result Flagging Label: | RIN N/A |

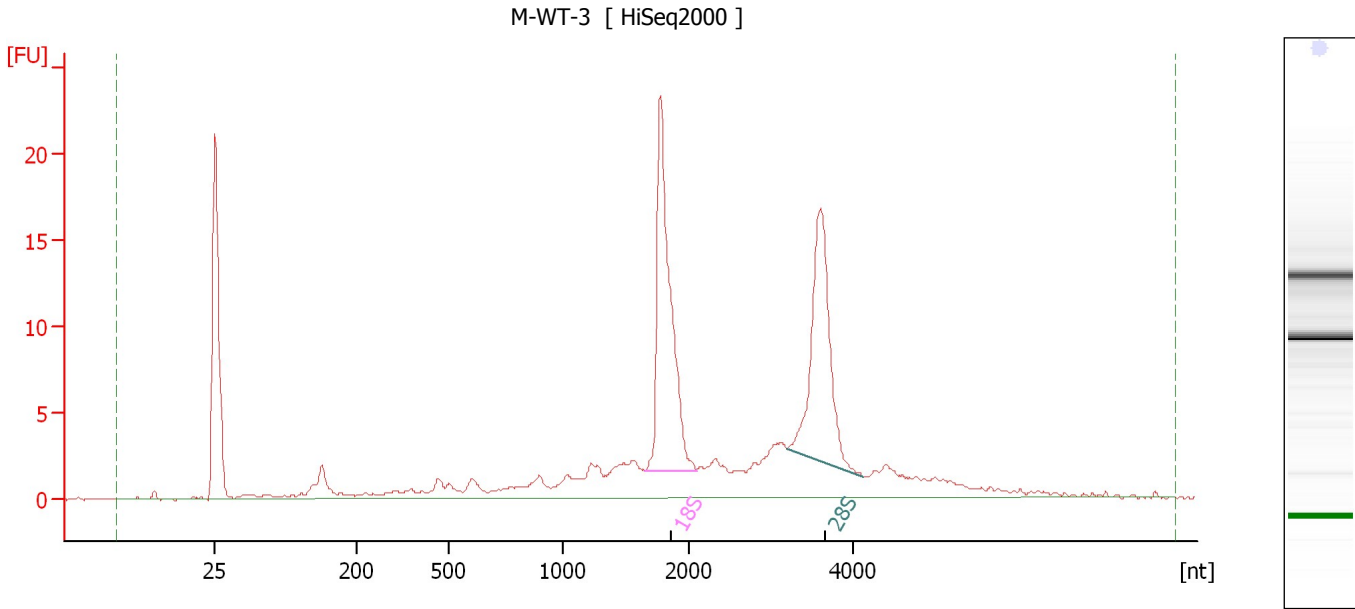
Fragment table for sample 2 : M-WT-2

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,642 | 2,062 | 28.5 | 33.2 |
| 28S | 3,207 | 4,142 | 8.6 | 10.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : M-WT-3

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 151.5 | RNA Integrity Number (RIN): | 8.5 (B.02.08) |
| RNA Concentration: | 76 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.8 | Result Flagging Label: | RIN: 8.50 |

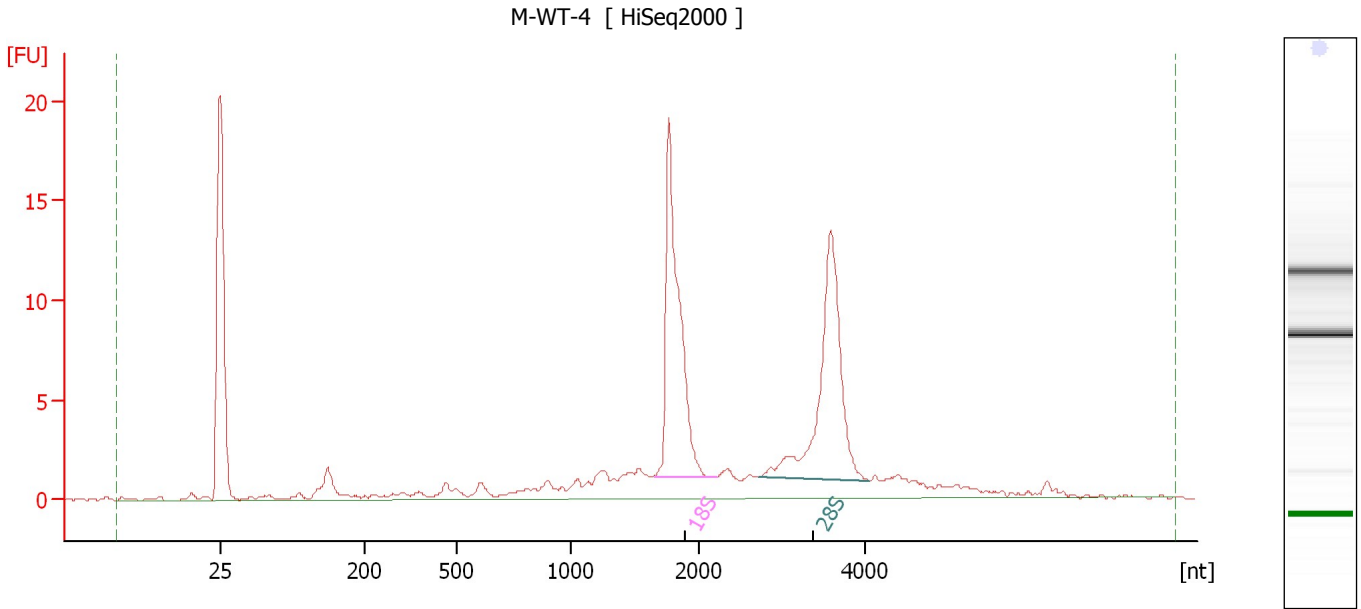
Fragment table for sample 3 : M-WT-3

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,649 | 2,079 | 33.1 | 21.9 |
| 28S | 3,187 | 4,125 | 27.3 | 18.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : M-WT-4

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 111.1 | RNA Integrity Number (RIN): | 9 (B.02.08) |
| RNA Concentration: | 56 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.0 | Result Flagging Label: | RIN:9 |

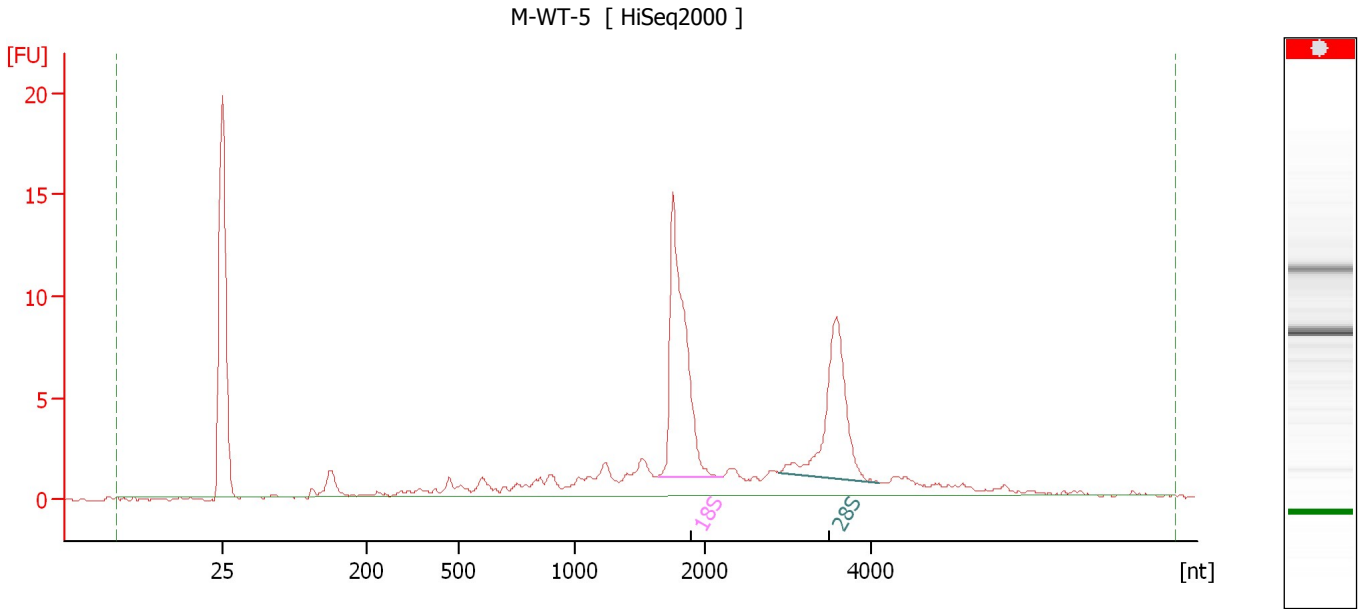
Fragment table for sample 4 : M-WT-4

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,656 | 2,199 | 27.7 | 24.9 |
| 28S | 2,715 | 4,044 | 26.6 | 23.9 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : M-WT-5

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 91.7 | RNA Integrity Number (RIN): | N/A (B.02.08) |
| RNA Concentration: | 46 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.7 | Result Flagging Label: | RIN N/A |

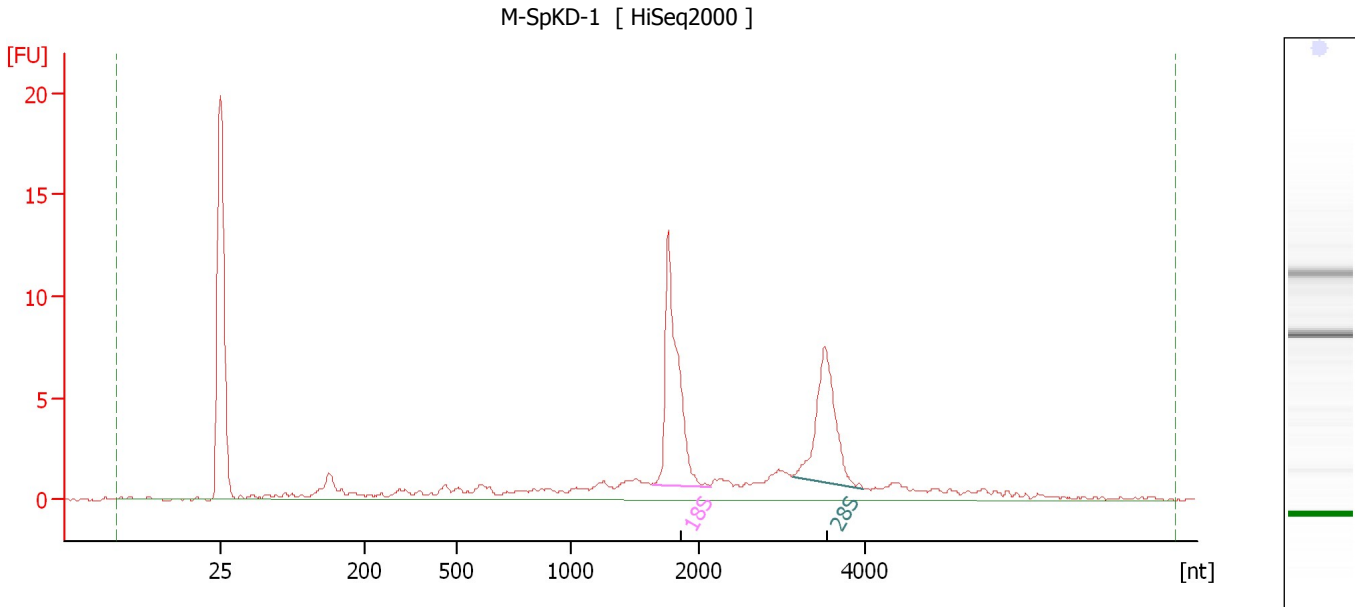
Fragment table for sample 5 : M-WT-5

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,650 | 2,226 | 24.0 | 26.1 |
| 28S | 2,894 | 4,115 | 16.4 | 17.9 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
 Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M-SpKD-1

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 80.5 | RNA Integrity Number (RIN): | 8.6 (B.02.08) |
| RNA Concentration: | 40 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.7 | Result Flagging Label: | RIN: 8.60 |

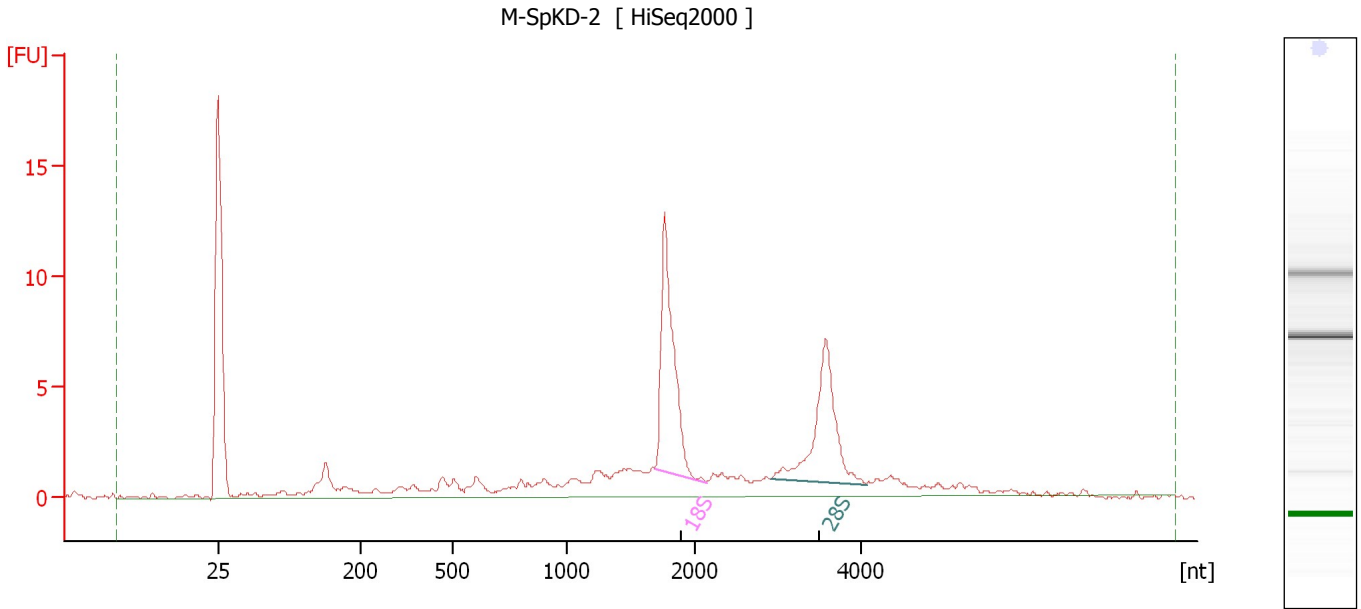
Fragment table for sample 6 : M-SpKD-1

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,639 | 2,122 | 17.9 | 22.3 |
| 28S | 3,115 | 3,980 | 12.9 | 16.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : M-SpKD-2

RNA Area: 78.5 RNA Integrity Number (RIN): 8 (B.02.08)
RNA Concentration: 39 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.8 Result Flagging Label: RIN:8

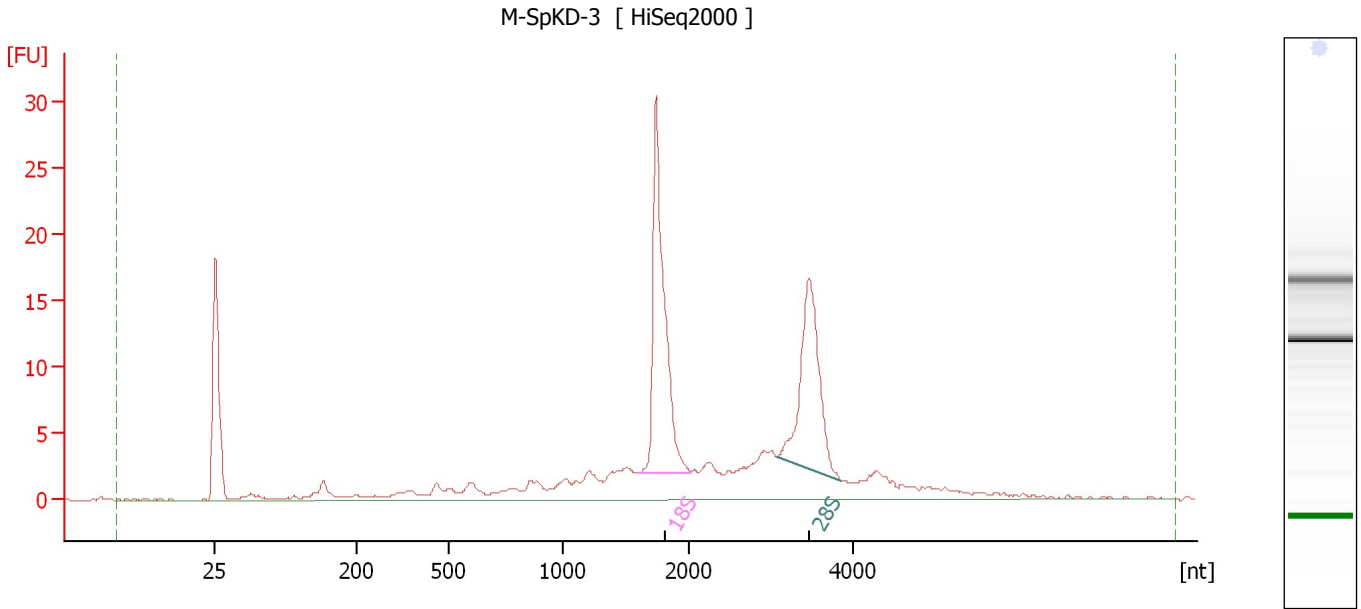
Fragment table for sample 7 : M-SpKD-2

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,678 | 2,133 | 16.6 | 21.1 |
| 28S | 2,911 | 4,063 | 13.2 | 16.8 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : M-SpKD-3

RNA Area: 165.4 RNA Integrity Number (RIN): 8.3 (B.02.08)
RNA Concentration: 83 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.8 Result Flagging Label: RIN: 8.30

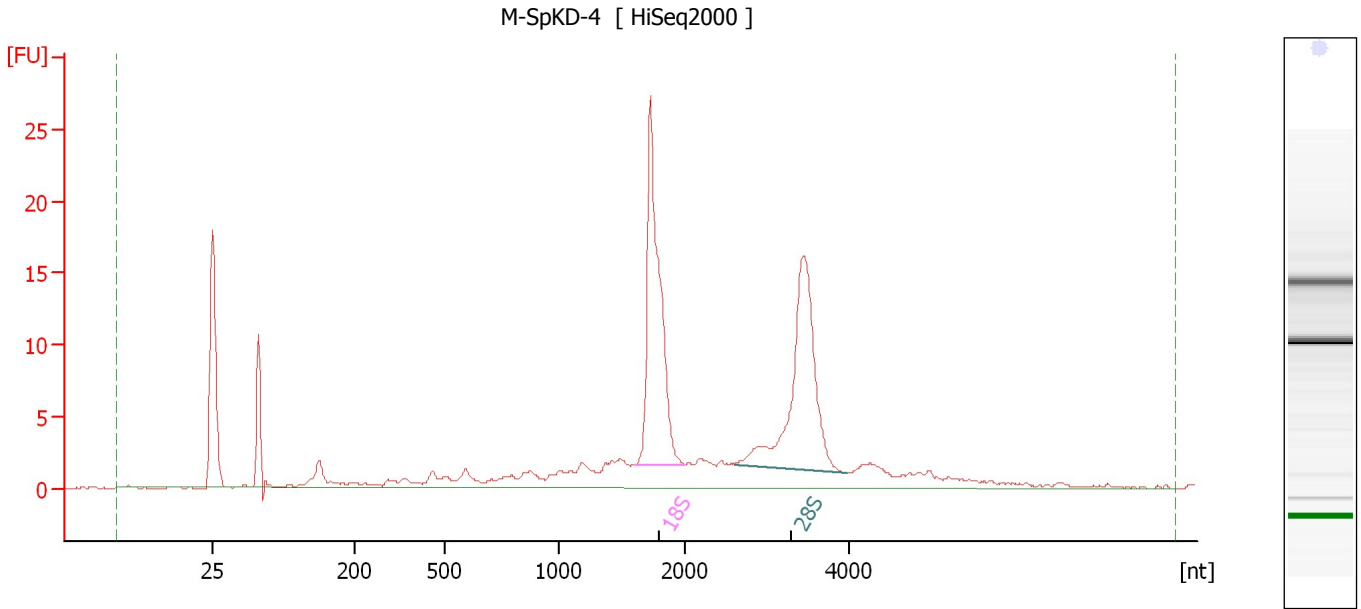
Fragment table for sample 8 : M-SpKD-3

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,599 | 2,014 | 37.3 | 22.6 |
| 28S | 3,070 | 3,852 | 28.1 | 17.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M-SpKD-4

RNA Area: 162.3 RNA Integrity Number (RIN): 8.8 (B.02.08)
RNA Concentration: 81 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.9 Result Flagging Label: RIN: 8.80

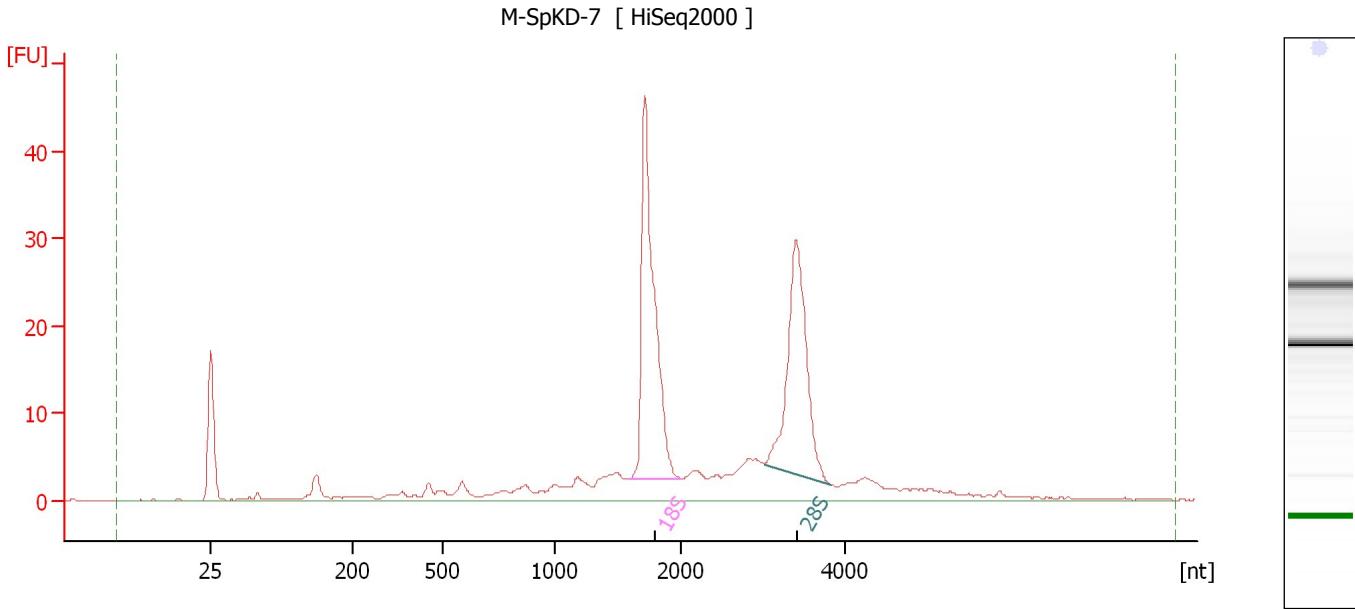
Fragment table for sample 9 : M-SpKD-4

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,604 | 1,991 | 37.9 | 23.3 |
| 28S | 2,601 | 3,988 | 35.8 | 22.1 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
 Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : M-SpKD-7

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 250.0 | RNA Integrity Number (RIN): | 8.8 (B.02.08) |
| RNA Concentration: | 125 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.8 | Result Flagging Label: | RIN: 8.80 |

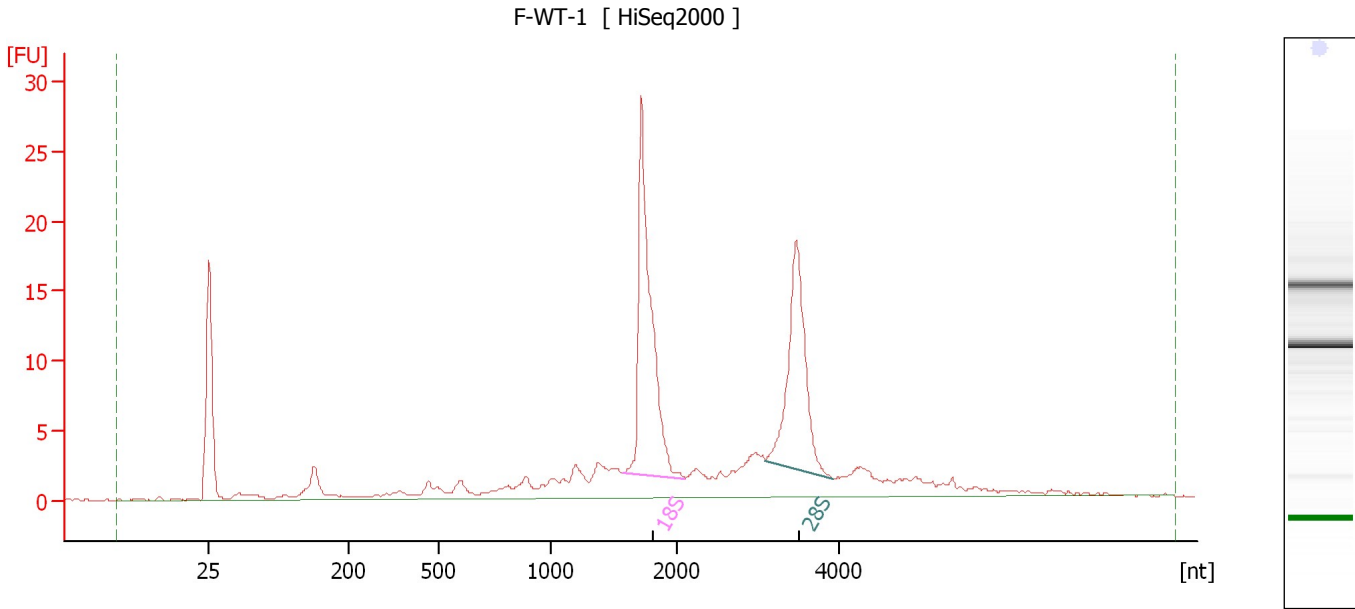
Fragment table for sample 10 : M-SpKD-7

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,593 | 1,998 | 64.4 | 25.8 |
| 28S | 3,022 | 3,837 | 53.4 | 21.4 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : F-WT-1

RNA Area: 164.5 RNA Integrity Number (RIN): 8.5 (B.02.08)
RNA Concentration: 82 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.7 Result Flagging Label: RIN: 8.50

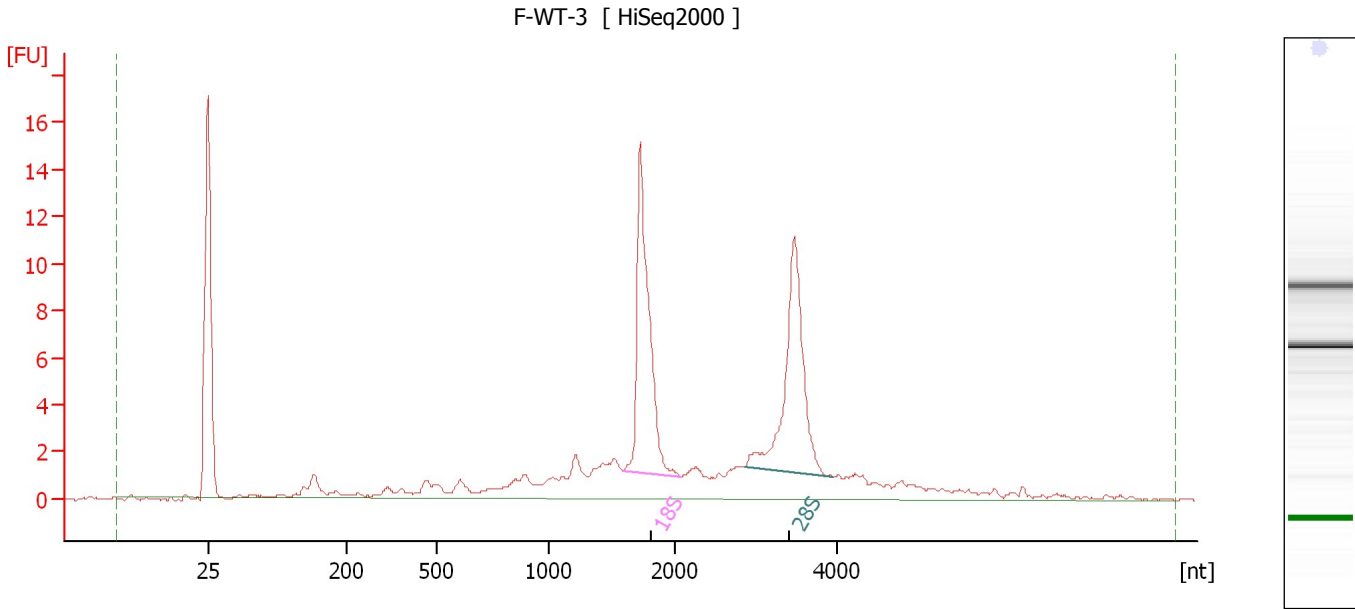
Fragment table for sample 11 : F-WT-1

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,564 | 2,100 | 39.2 | 23.8 |
| 28S | 3,090 | 3,935 | 29.0 | 17.6 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 12 : F-WT-3

RNA Area: 94.1 RNA Integrity Number (RIN): 8.4 (B.02.08)
RNA Concentration: 47 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.0 Result Flagging Label: RIN: 8.40

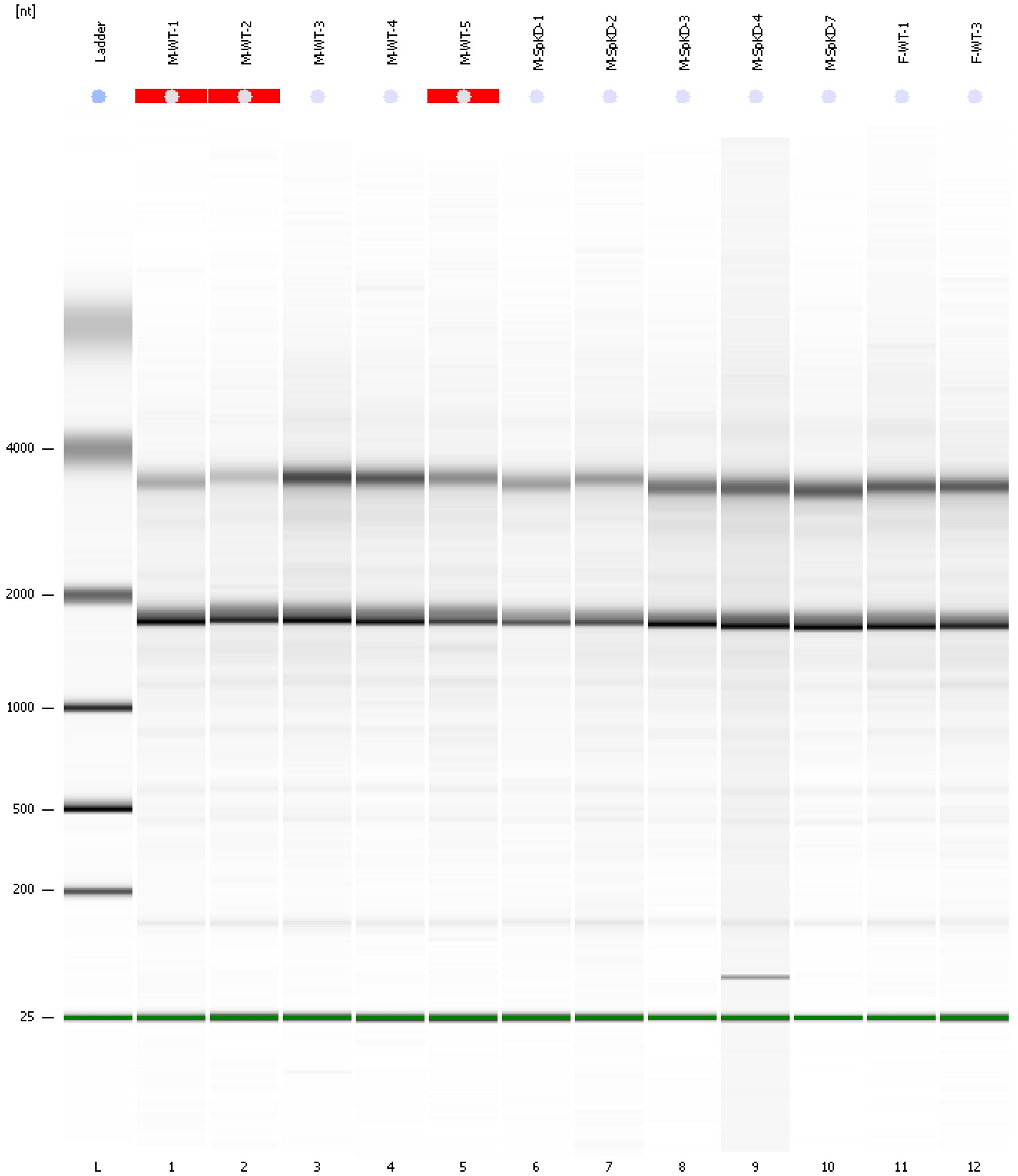
Fragment table for sample 12 : F-WT-3

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,580 | 2,073 | 20.0 | 21.3 |
| 28S | 2,853 | 3,964 | 19.2 | 20.5 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
Modified: 11/8/2019 1:34:28 PM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad

Created: 11/8/2019 1:10:42 PM
 Modified: 11/8/2019 1:34:28 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 | | 11/8/2019 1:34:28 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-11-08\2019-11-08_002.xad) | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938C | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE34903152 | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 11/8/2019 1:10:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |