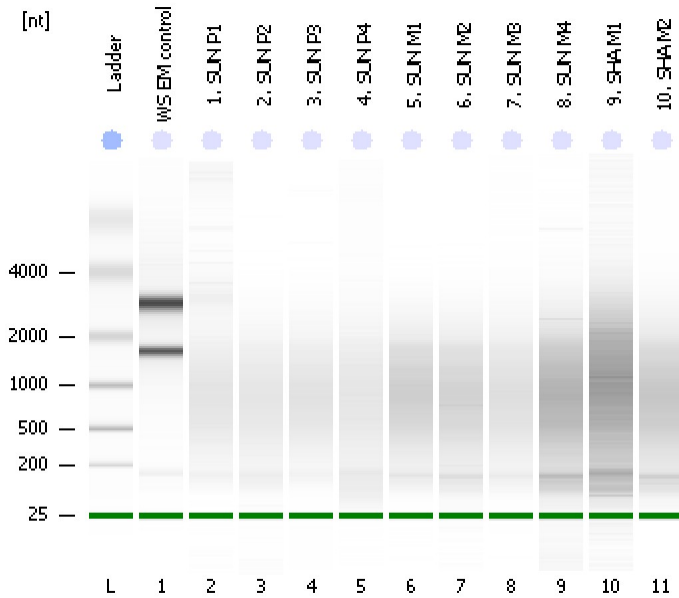


Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

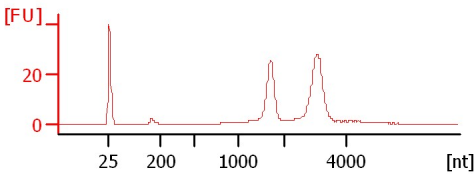
Assay Information:

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

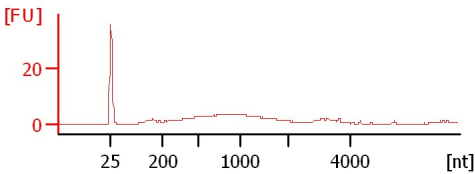
Chip Information:

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

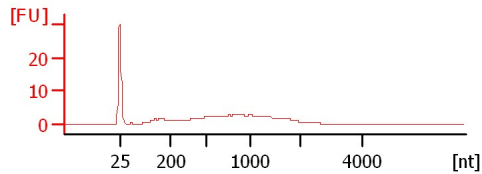
WS EM control
RIN: 10



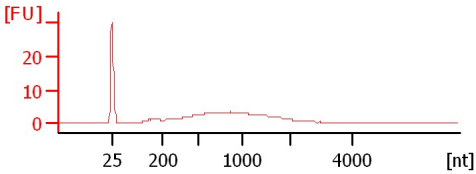
1. SUN P1
RIN: 1.50



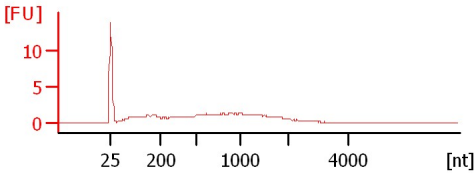
2. SUN P2
RIN: 1.30



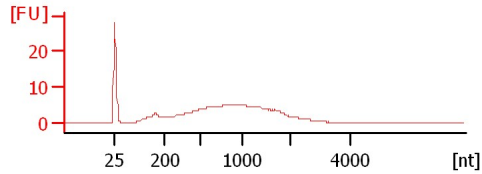
3. SUN P3
RIN: 1.40



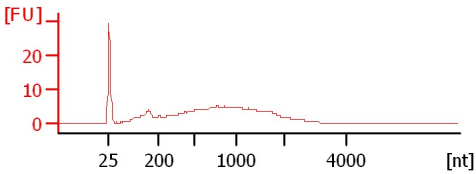
4. SUN P4
RIN: 1.10



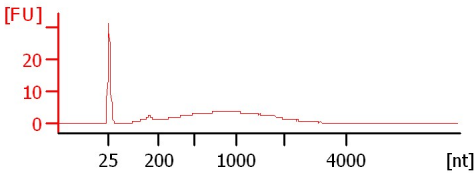
5. SUN M1
RIN: 2.70



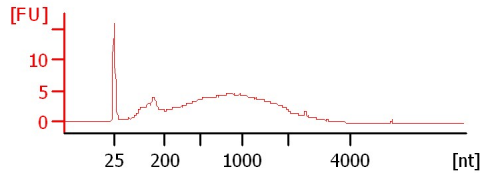
6. SUN M2
RIN: 2.10



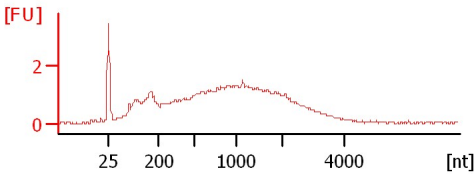
7. SUN M3
RIN: 1.40



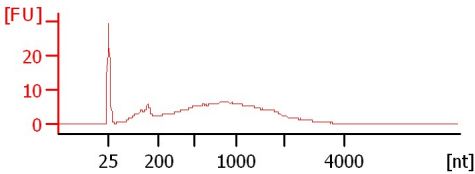
8. SUN M4
RIN: 2.30



9. SHA M1
RIN: 2.40



10. SHA M2
RIN: 2.10



Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|---------------|----------------|--------|-------------------|--------------|
| WS EM control | | ✓ | RIN:10 | |
| 1. SUN P1 | | ✓ | RIN: 1.50 | |
| 2. SUN P2 | | ✓ | RIN: 1.30 | |
| 3. SUN P3 | | ✓ | RIN: 1.40 | |
| 4. SUN P4 | | ✓ | RIN: 1.10 | |
| 5. SUN M1 | | ✓ | RIN: 2.70 | |
| 6. SUN M2 | | ✓ | RIN: 2.10 | |
| 7. SUN M3 | | ✓ | RIN: 1.40 | |
| 8. SUN M4 | | ✓ | RIN: 2.30 | |
| 9. SHA M1 | | ✓ | RIN: 2.40 | |
| 10. SHA M2 | | ✓ | RIN: 2.10 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12

Minimum Visible Range [s] : 17

Maximum Visible Range [s] : 70

Start Analysis Time Range [s] : 18

End Analysis Time Range [s] : 69

Ladder Concentration [pg/ μ l] : 1000

Lower Marker Concentration [pg/ μ l] : 0

Upper Marker Concentration [pg/ 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] : 18

Integration End Time [s] : 69

Slope Threshold : 0.6

Height Threshold [FU] : 0.5

Area Threshold : 0.2

Width Threshold [s] : 0.3

Baseline Plateau [s] : 6

Filter Settings

Filter Width [s] : 0.5

Polynomial Order : 4

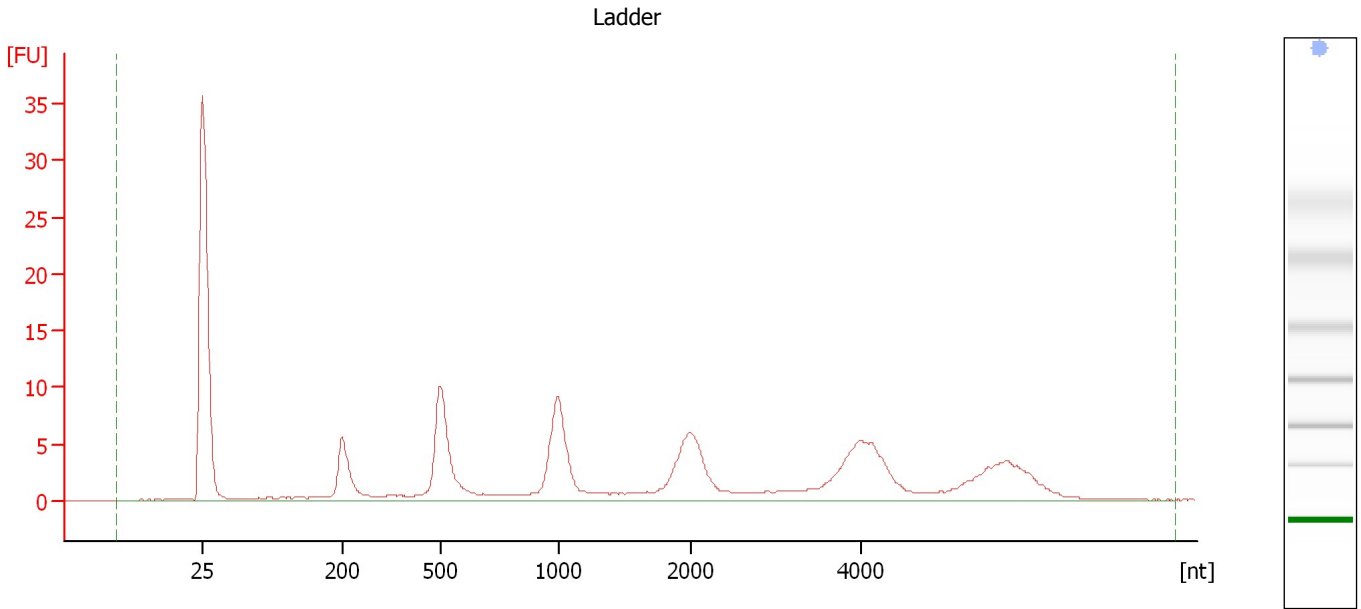
Ladder

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

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary



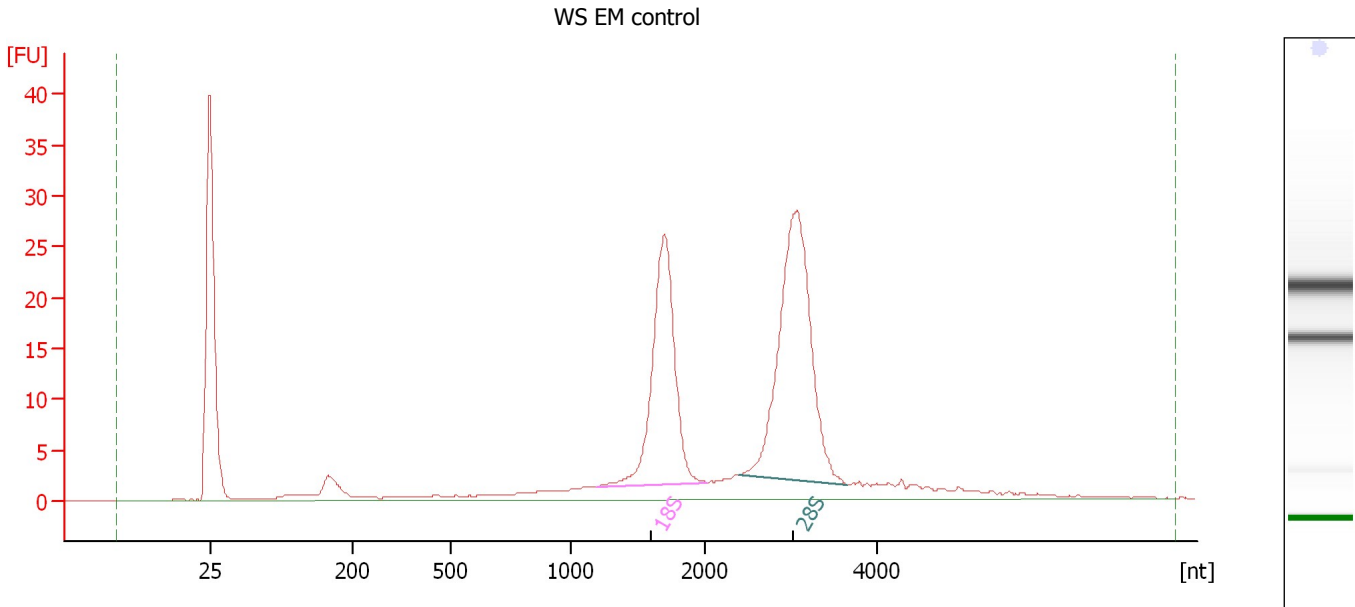
Overall Results for Ladder

| | | | |
|--------------------|-------------|------------------------|---|
| RNA Area: | 143.5 | Result Flagging Color: | |
| RNA Concentration: | 1,000 pg/μl | Result Flagging Label: | All Other Samples |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WS EM control

RNA Area: 242.6 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 1,691 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN:10

Fragment table for sample 1 : WS EM control

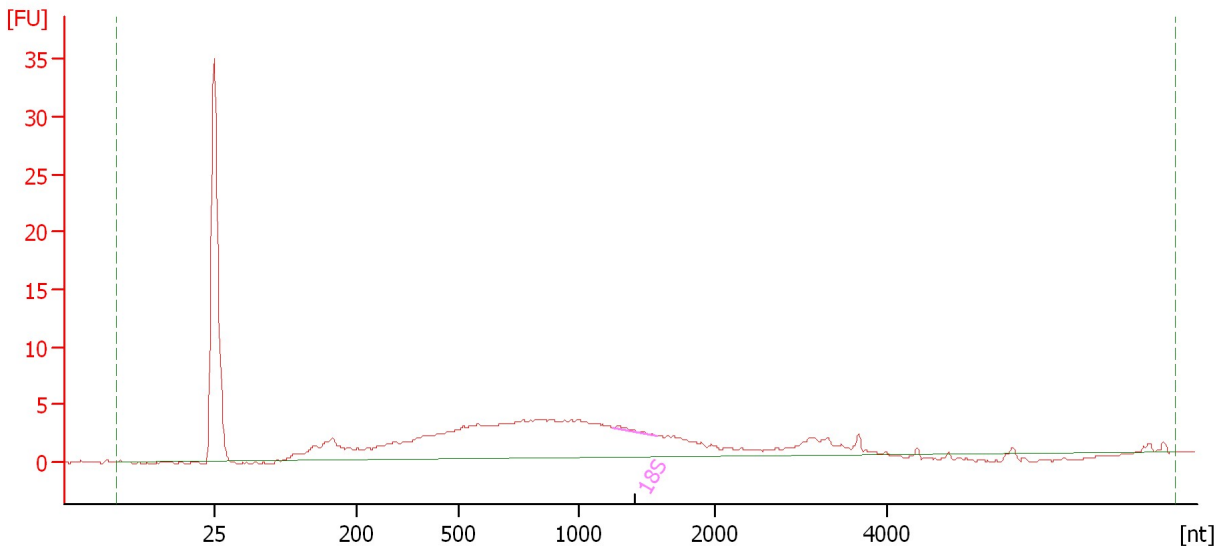
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,198 | 2,027 | 65.0 | 26.8 |
| 28S | 2,399 | 3,638 | 89.9 | 37.1 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

1. SUN P1



Overall Results for sample 2 : 1. SUN P1

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 122.8 | RNA Integrity Number (RIN): | 1.5 (B.02.08) |
| RNA Concentration: | 856 µg/µl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 1.50 |

Fragment table for sample 2 : 1. SUN P1

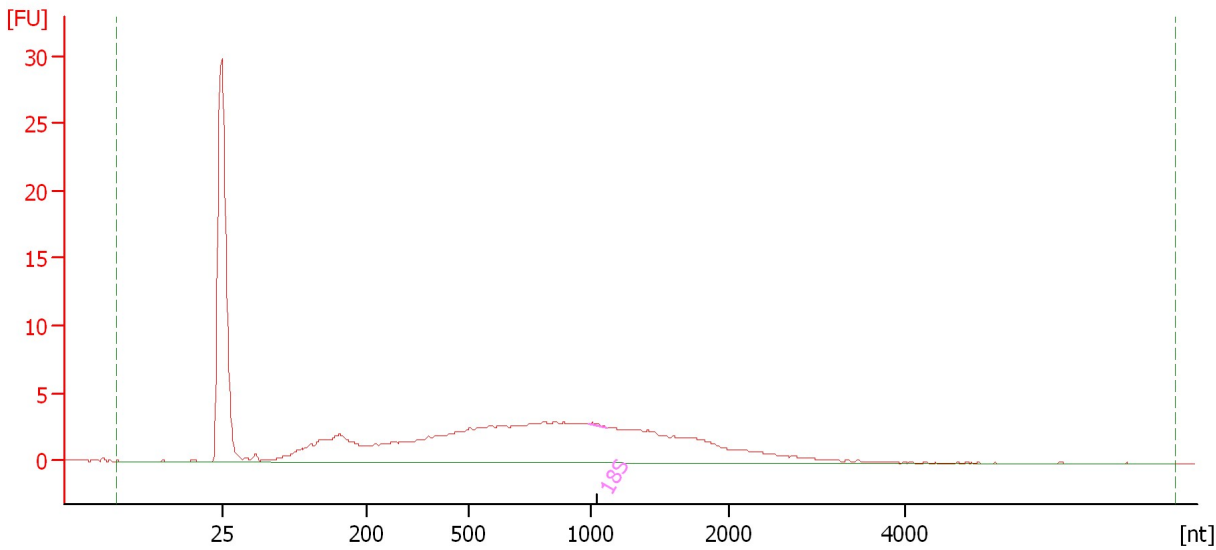
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,253 | 1,576 | 0.5 | 0.4 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

2. SUN P2



Overall Results for sample 3 : 2. SUN P2

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 120.1 | RNA Integrity Number (RIN): | 1.3 (B.02.08) |
| RNA Concentration: | 837 pg/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 1.30 |

Fragment table for sample 3 : 2. SUN P2

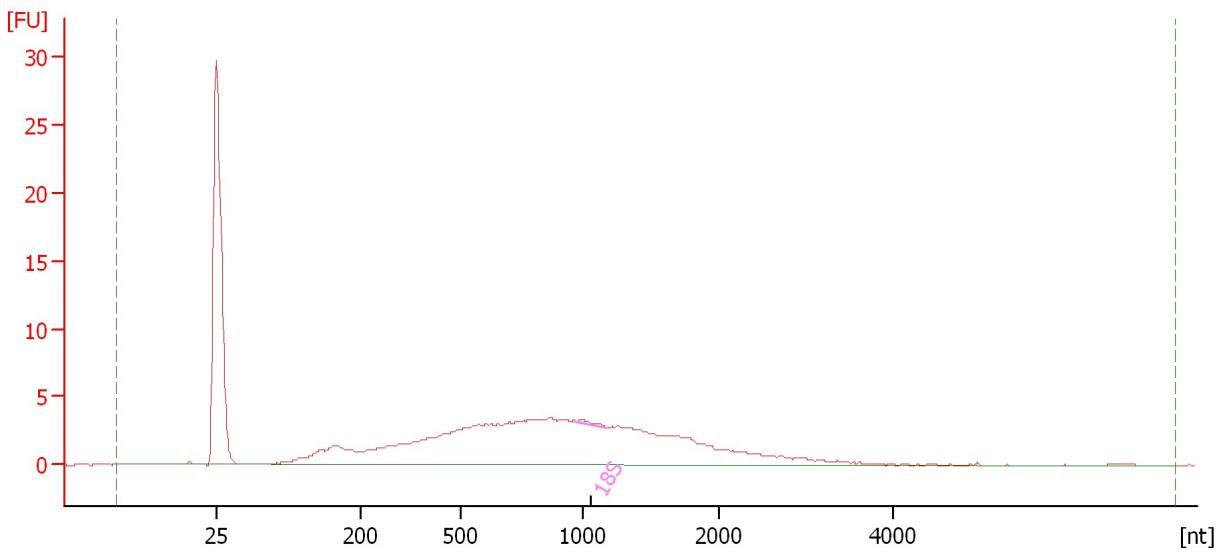
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 987 | 1,118 | 0.2 | 0.1 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

3. SUN P3



Overall Results for sample 4 : 3. SUN P3

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 122.5 | RNA Integrity Number (RIN): | 1.4 (B.02.08) |
| RNA Concentration: | 853 µg/µl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 1.40 |

Fragment table for sample 4 : 3. SUN P3

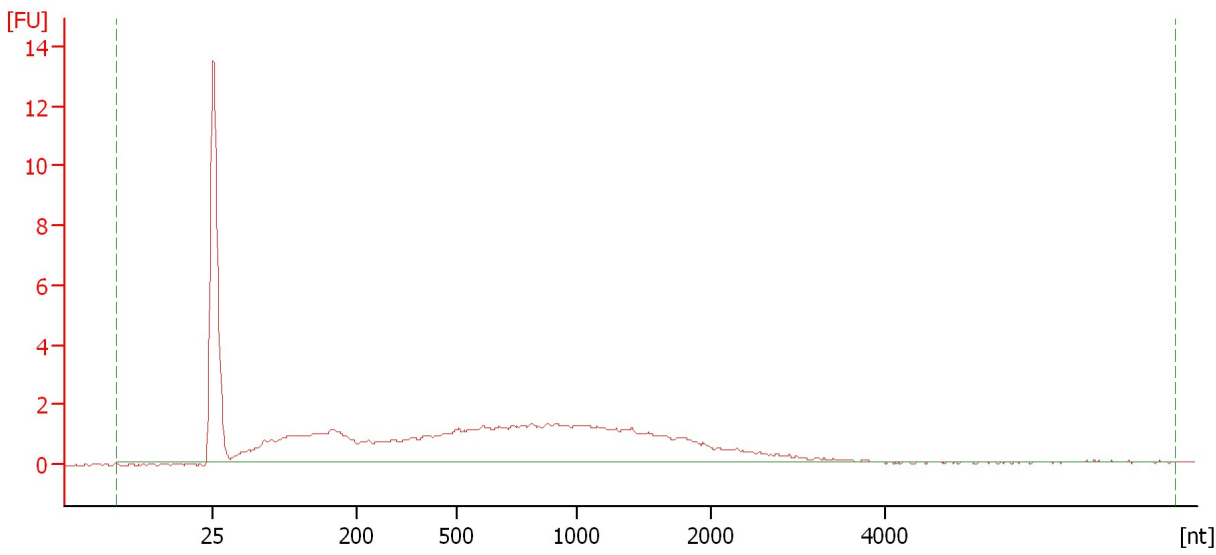
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 972 | 1,186 | 0.4 | 0.4 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

4. SUN P4



Overall Results for sample 5 : 4. SUN P4

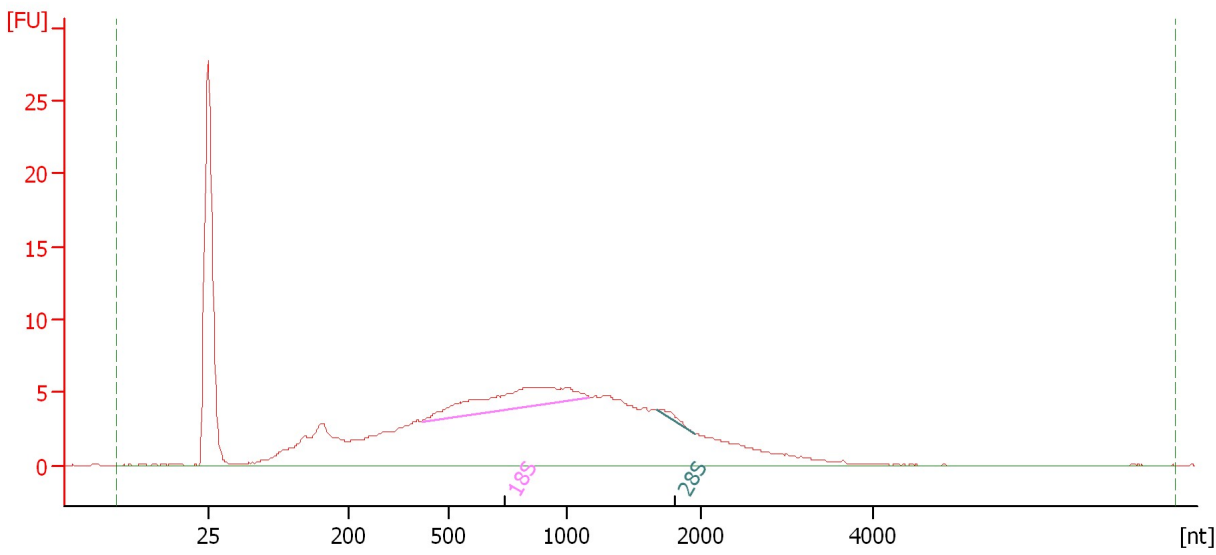
| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 61.0 | RNA Integrity Number (RIN): | 1.1 (B.02.08) |
| RNA Concentration: | 425 µg/µl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 1.10 |

Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
 Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

5. SUN M1



Overall Results for sample 6 : 5. SUN M1

| | | | |
|-------------------------|-------------|-----------------------------|---|
| RNA Area: | 203.0 | RNA Integrity Number (RIN): | 2.7 (B.02.08) |
| RNA Concentration: | 1,415 pg/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.1 | Result Flagging Label: | RIN: 2.70 |

Fragment table for sample 6 : 5. SUN M1

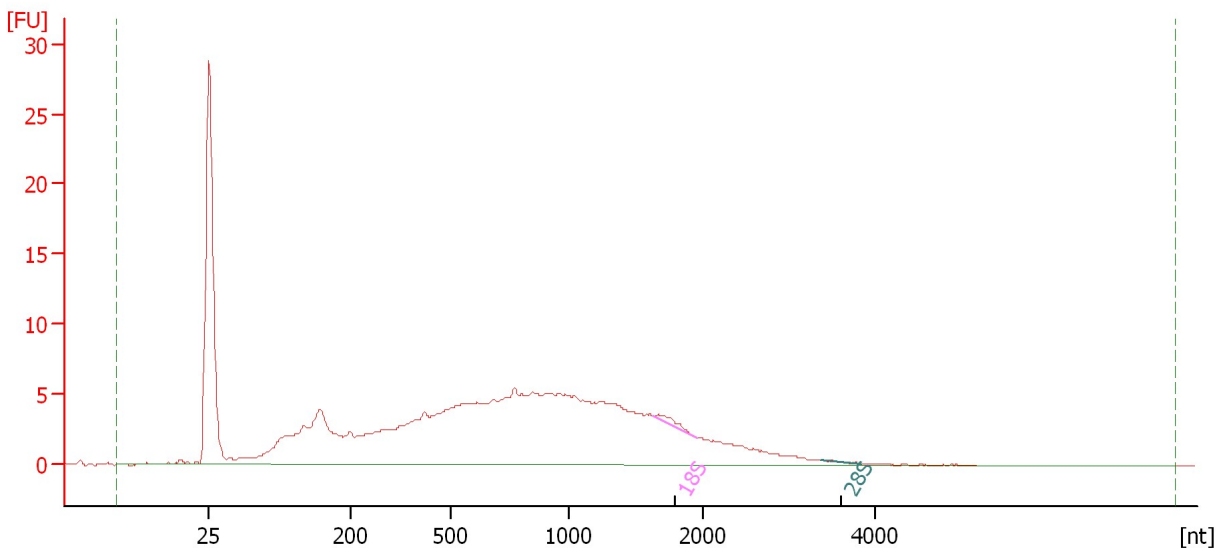
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 421 | 1,163 | 16.6 | 8.2 |
| 28S | 1,665 | 1,945 | 1.0 | 0.5 |

Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
 Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

6. SUN M2



Overall Results for sample 7 : 6. SUN M2

| | | | |
|-------------------------|-------------|-----------------------------|---|
| RNA Area: | 214.0 | RNA Integrity Number (RIN): | 2.1 (B.02.08) |
| RNA Concentration: | 1,492 pg/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.1 | Result Flagging Label: | RIN: 2.10 |

Fragment table for sample 7 : 6. SUN M2

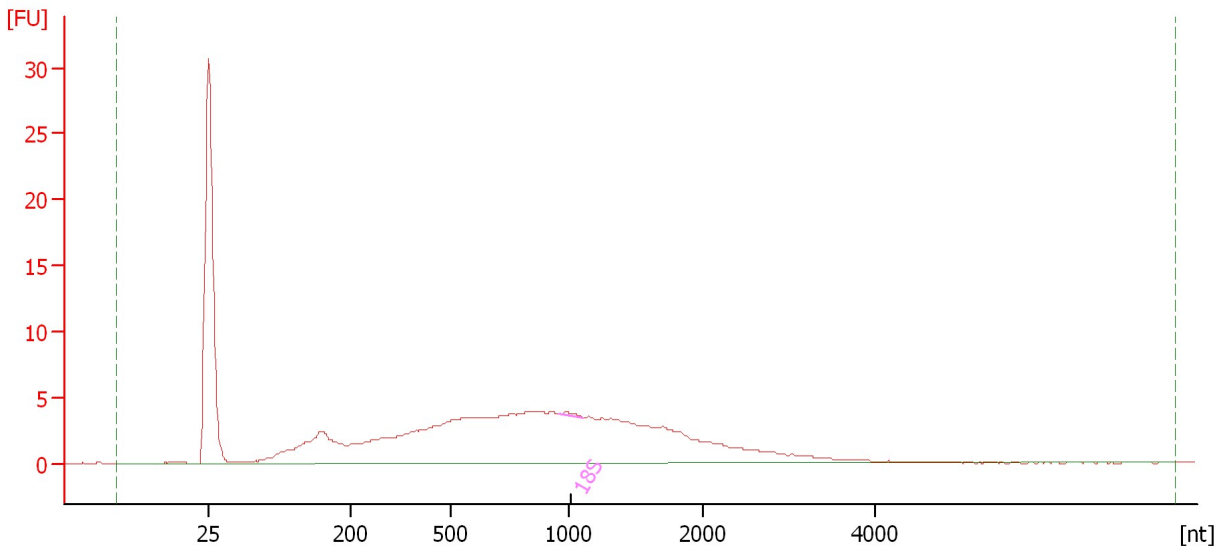
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,627 | 1,945 | 1.1 | 0.5 |
| 28S | 3,355 | 3,840 | 0.1 | 0.1 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

7. SUN M3



Overall Results for sample 8 : 7. SUN M3

| | | | |
|-------------------------|-------------|-----------------------------|---|
| RNA Area: | 162.3 | RNA Integrity Number (RIN): | 1.4 (B.02.08) |
| RNA Concentration: | 1,131 pg/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 1.40 |

Fragment table for sample 8 : 7. SUN M3

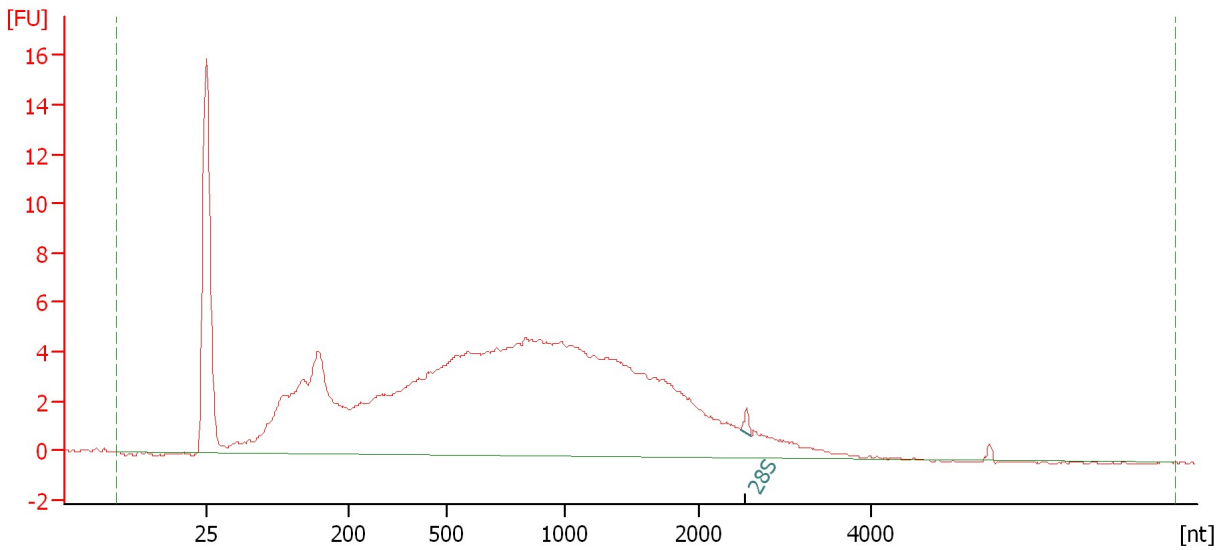
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 953 | 1,101 | 0.3 | 0.2 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

8. SUN M4



Overall Results for sample 9 : 8. SUN M4

| | | | |
|-------------------------|-------------|-----------------------------|---|
| RNA Area: | 202.3 | RNA Integrity Number (RIN): | 2.3 (B.02.08) |
| RNA Concentration: | 1,410 pg/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 2.30 |

Fragment table for sample 9 : 8. SUN M4

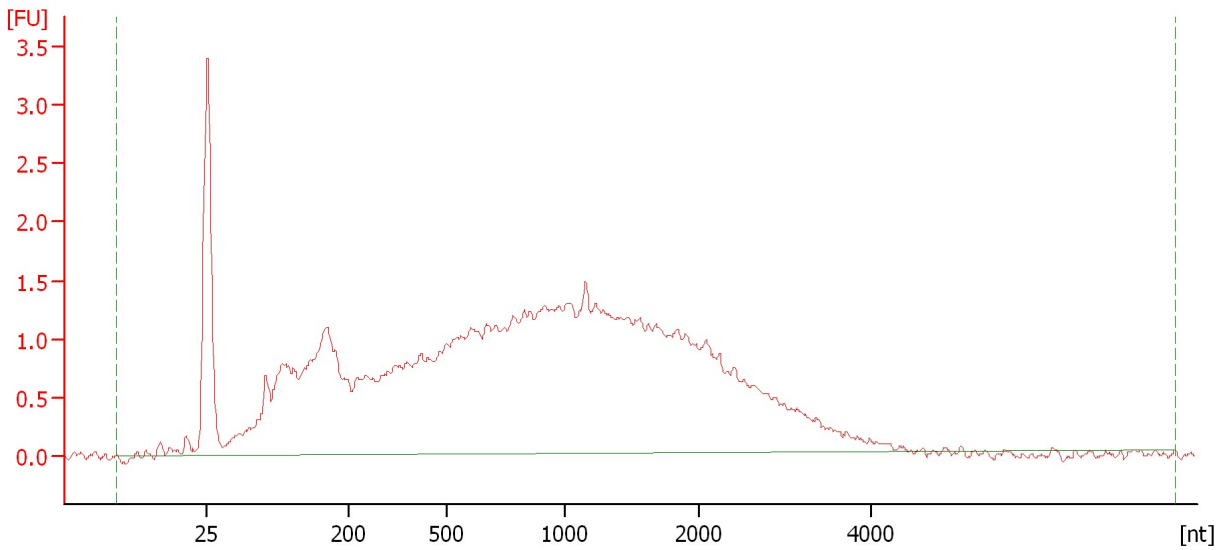
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 28S | 2,487 | 2,612 | 0.5 | 0.3 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...

9. SHA M1



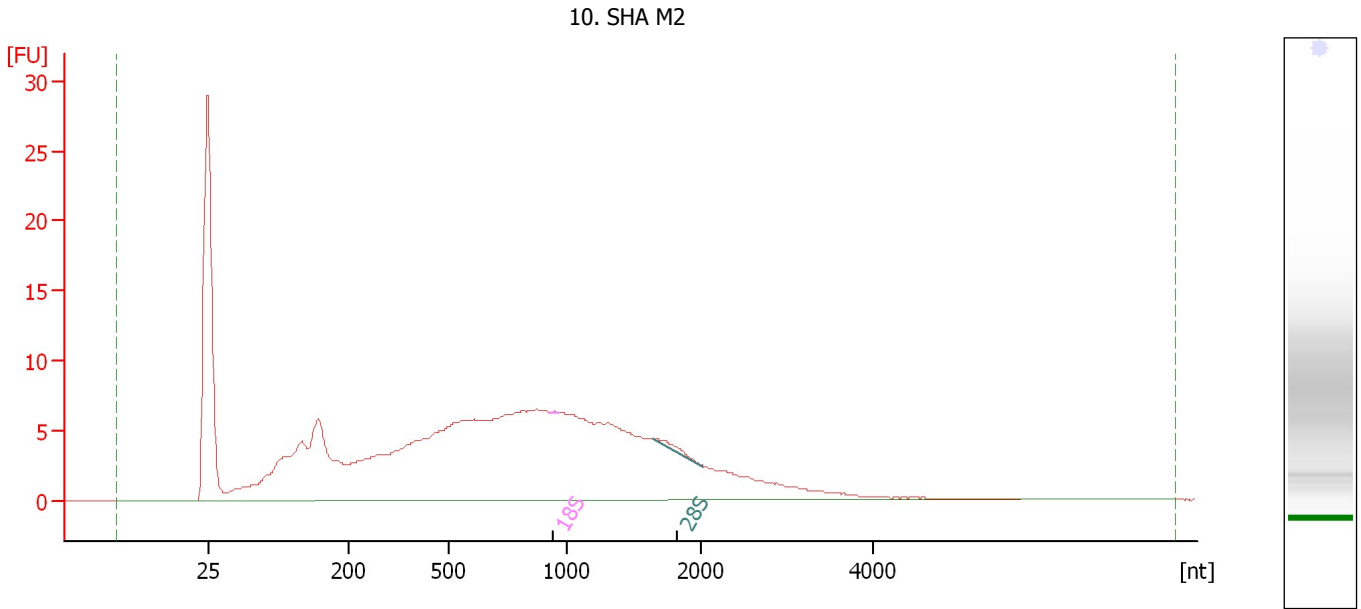
Overall Results for sample 10 : 9. SHA M1

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 62.5 | RNA Integrity Number (RIN): | 2.4 (B.02.08) |
| RNA Concentration: | 436 µg/µl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 2.40 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 10. SHA M2

RNA Area: 281.4 RNA Integrity Number (RIN): 2.1 (B.02.08)
RNA Concentration: 1,961 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 16.5 Result Flagging Label: RIN: 2.10

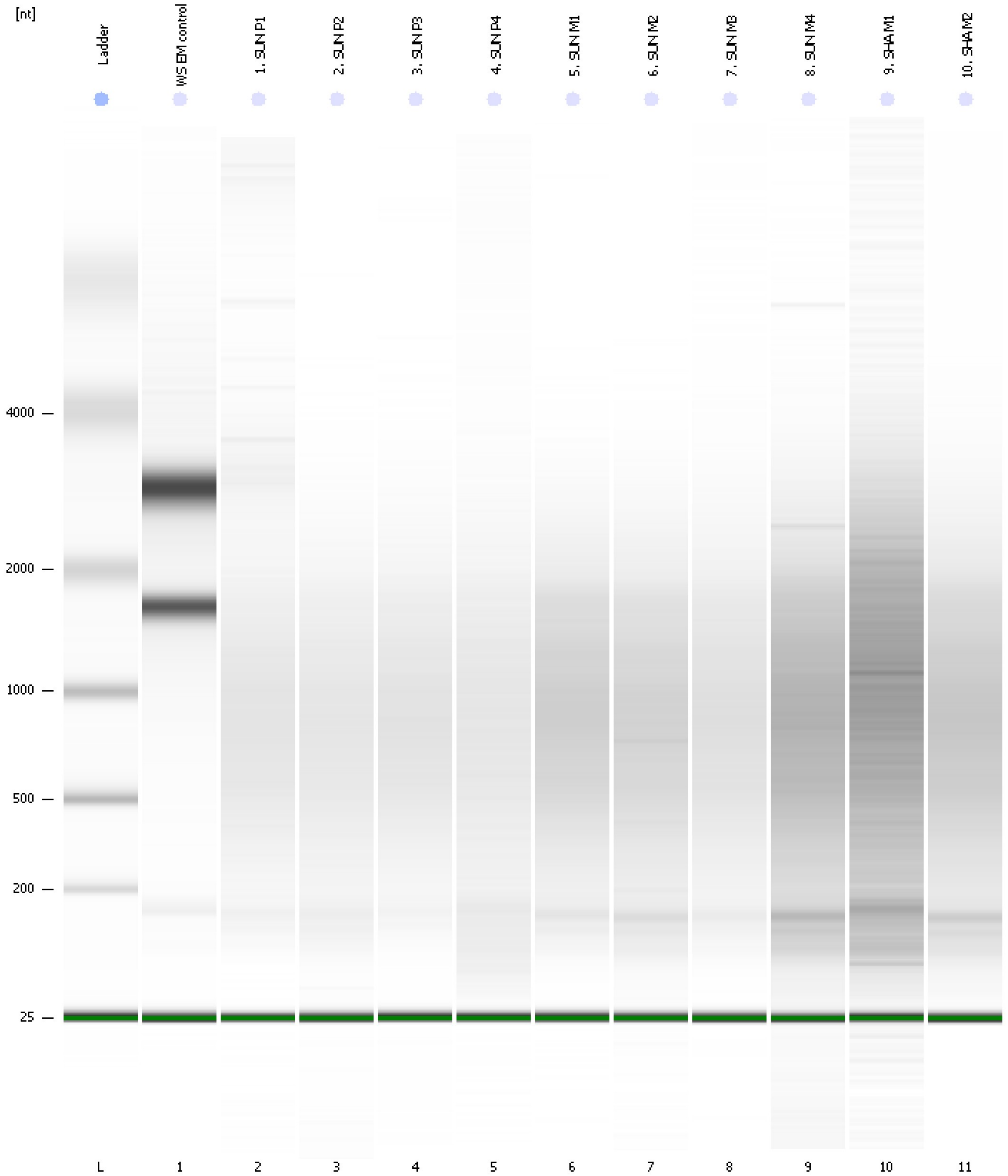
Fragment table for sample 11 : 10. SHA M2

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 925 | 961 | 0.1 | 0.0 |
| 28S | 1,642 | 2,026 | 1.1 | 0.4 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
Modified: 11/16/2012 3:55:14 PM

Gel Image



Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad

Created: 11/16/2012 3:32:18 PM
 Modified: 11/16/2012 3:55:14 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|---|--------|------------|----------|--------------|-----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 12) | | Instrument | Run | | 11/16/2012 3:55:11 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-11-16\2012-11-16_003.xad) | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 11/16/2012 3:32:24 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |