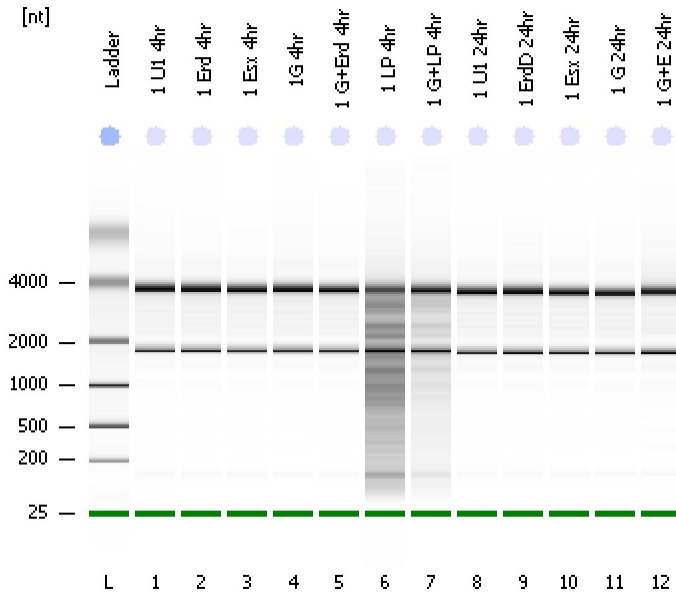


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electrophoresis File Run Summary



Instrument Information:

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

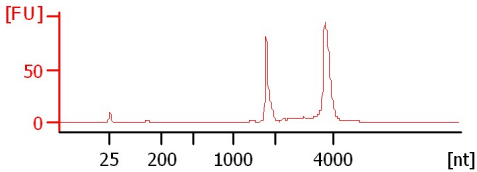
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA 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.

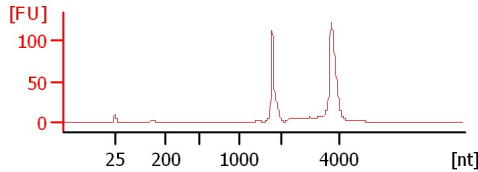
Chip Information:

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

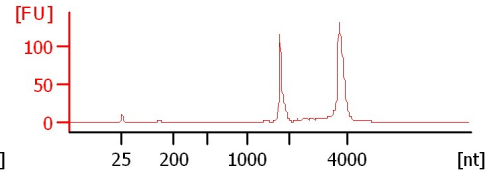
1 U1 4hr
HiSeq 306 Total RNA QC
RIN:10



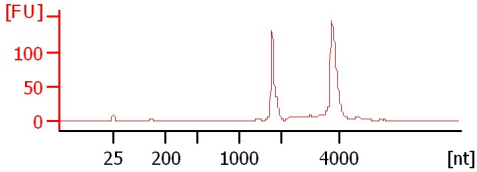
1 Erd 4hr
HiSeq 306 Total RNA QC
RIN: 9.90



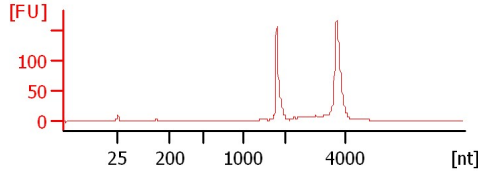
1 Esx 4hr
HiSeq 306 Total RNA QC
RIN:10



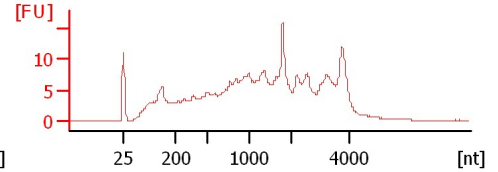
1 G 4hr
HiSeq 306 Total RNA QC
RIN:10



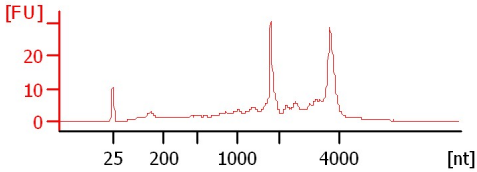
1 G+Erd 4hr
HiSeq 306 Total RNA QC
RIN: 9.90



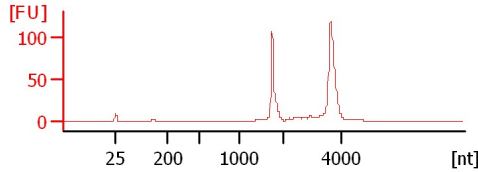
1 LP 4hr
HiSeq 306 Total RNA QC
RIN: 4.70



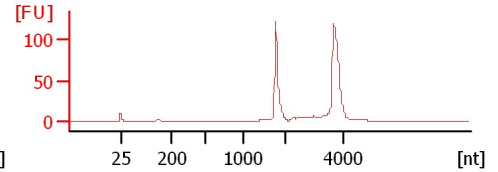
1 G+LP 4hr
HiSeq 306 Total RNA QC
RIN: 7.60



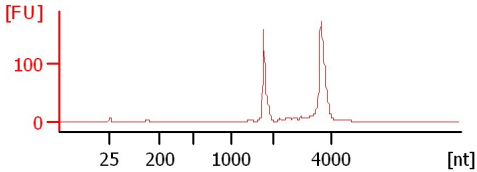
1 U1 24hr
HiSeq 306 Total RNA QC
RIN: 9.90



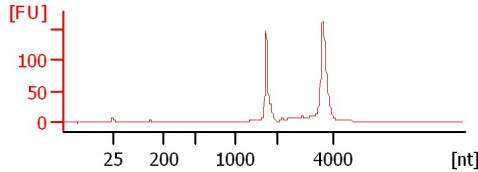
1 ErdD 24hr
HiSeq 306 Total RNA QC
RIN: 9.80



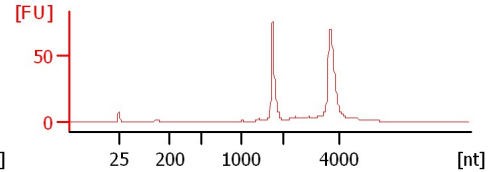
1 Esx 24hr
HiSeq 306 Total RNA QC
RIN:10



1 G 24hr
HiSeq 306 Total RNA QC
RIN: 9.90



1 G+E 24hr
HiSeq 306 Total RNA QC
RIN: 9.70



Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|------------------------|--------|-------------------|--------------|
| 1 U1 4hr | HiSeq 306 Total RNA QC | ✓ | RIN:10 | |
| 1 Erd 4hr | HiSeq 306 Total RNA QC | ✓ | RIN: 9.90 | |
| 1 Esx 4hr | HiSeq 306 Total RNA QC | ✓ | RIN:10 | |
| 1G 4hr | HiSeq 306 Total RNA QC | ✓ | RIN:10 | |
| 1 G+Erd 4hr | HiSeq 306 Total RNA QC | ✓ | RIN: 9.90 | |
| 1 LP 4hr | HiSeq 306 Total RNA QC | ✓ | RIN: 4.70 | |
| 1 G+LP 4hr | HiSeq 306 Total RNA QC | ✓ | RIN: 7.60 | |
| 1 U1 24hr | HiSeq 306 Total RNA QC | ✓ | RIN: 9.90 | |
| 1 ErdD 24hr | HiSeq 306 Total RNA QC | ✓ | RIN: 9.80 | |
| 1 Esx 24hr | HiSeq 306 Total RNA QC | ✓ | RIN:10 | |
| 1 G 24hr | HiSeq 306 Total RNA QC | ✓ | RIN: 9.90 | |
| 1 G+E 24hr | HiSeq 306 Total RNA QC | ✓ | RIN: 9.70 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

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

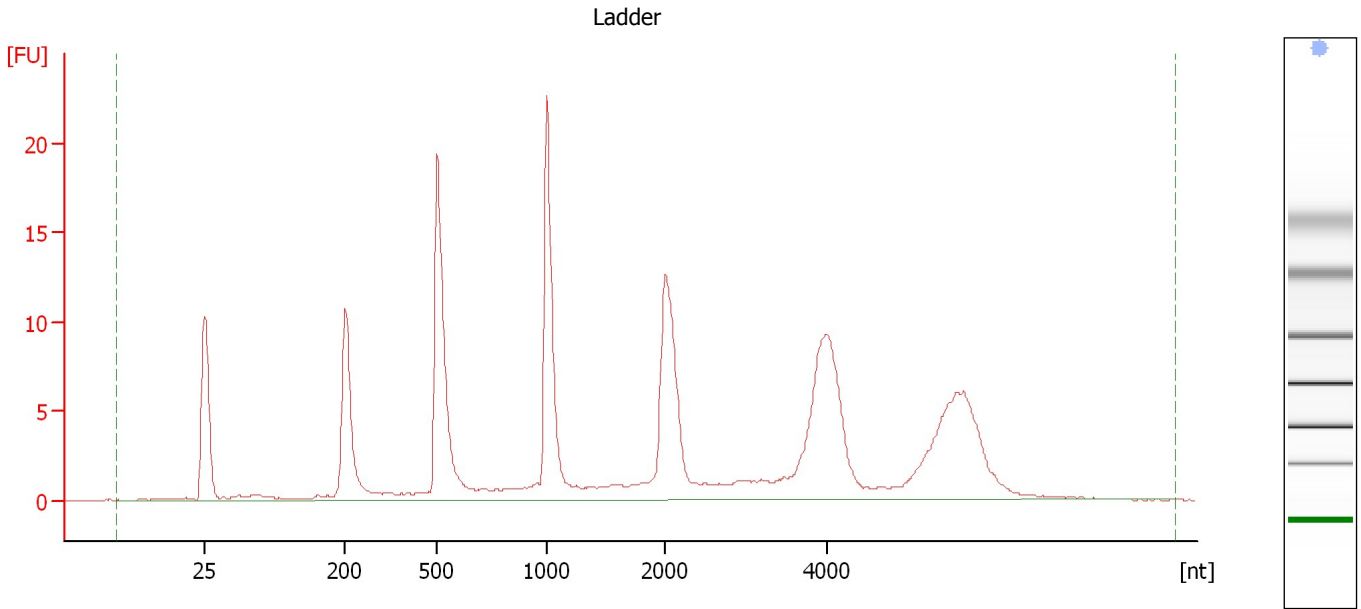
Ladder

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

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary



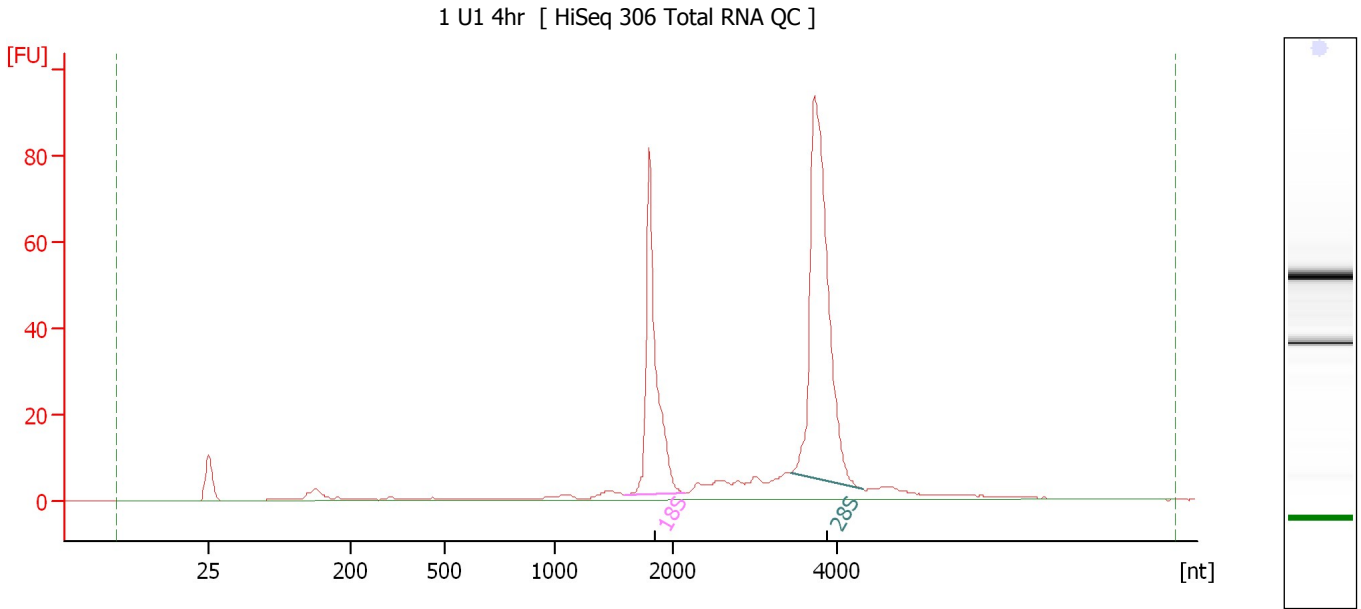
Overall Results for Ladder

| | | | |
|--------------------|-----------------|------------------------|---|
| RNA Area: | 182.3 | Result Flagging Color: | |
| RNA Concentration: | 150 ng/ μ l | Result Flagging Label: | All Other Samples |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1 U1 4hr

RNA Area: 388.0 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 319 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.8 Result Flagging Label: RIN:10

Fragment table for sample 1 : 1 U1 4hr

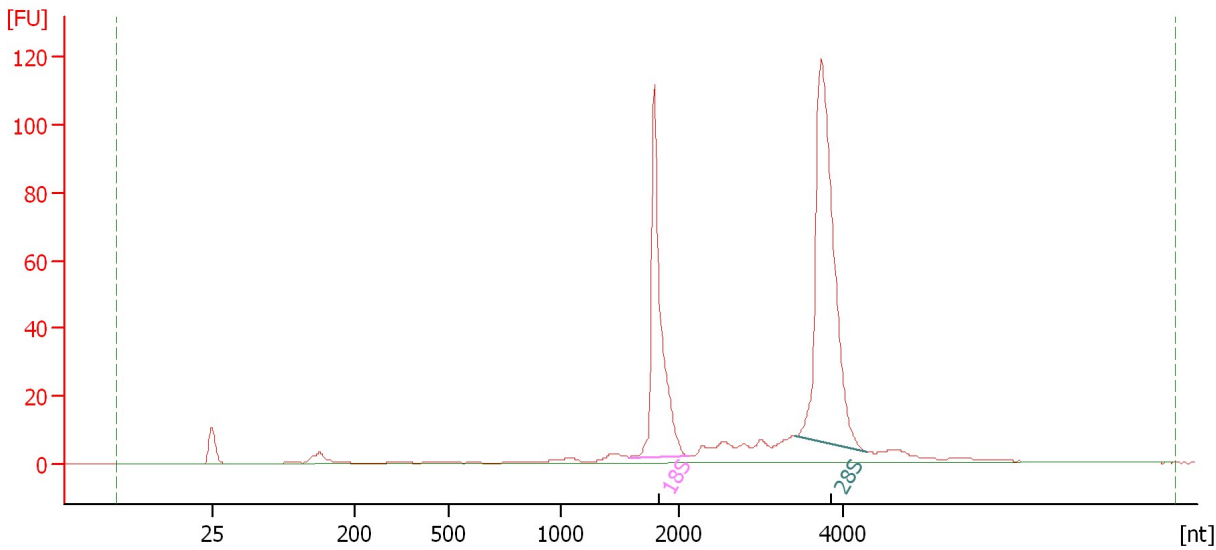
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,597 | 2,149 | 93.2 | 24.0 |
| 28S | 3,449 | 4,329 | 164.2 | 42.3 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...

1 Erd 4hr [HiSeq 306 Total RNA QC]



Overall Results for sample 2 : 1 Erd 4hr

RNA Area: 487.2 RNA Integrity Number (RIN): 9.9 (B.02.08)
RNA Concentration: 401 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 9.90

Fragment table for sample 2 : 1 Erd 4hr

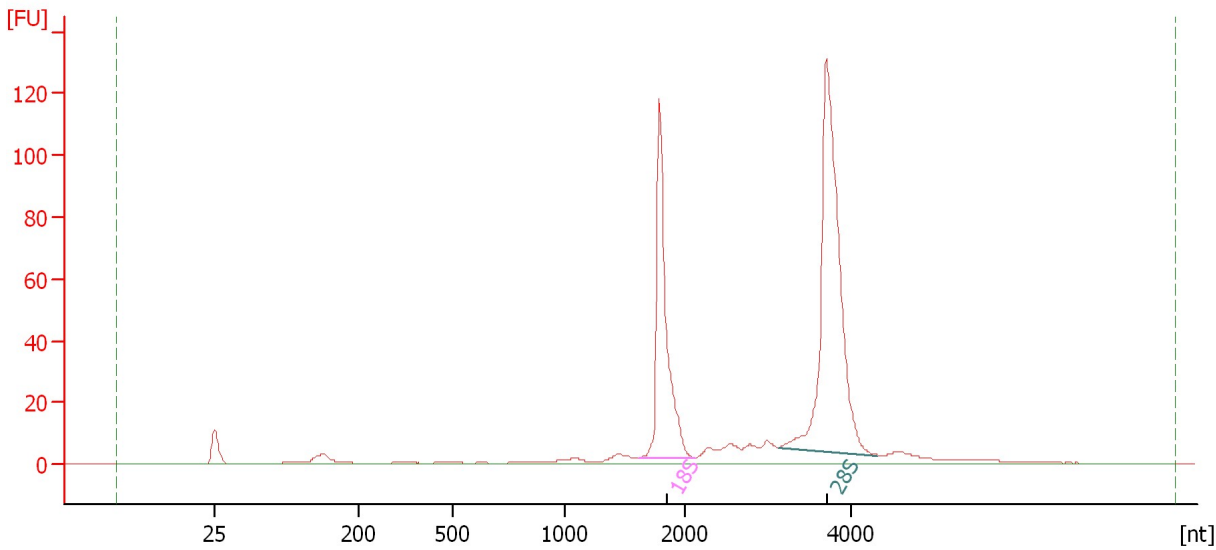
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,584 | 2,125 | 123.5 | 25.3 |
| 28S | 3,404 | 4,291 | 204.8 | 42.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...

1 Esx 4hr [HiSeq 306 Total RNA QC]



Overall Results for sample 3 : 1 Esx 4hr

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 510.9 | RNA Integrity Number (RIN): | 10 (B.02.08) |
| RNA Concentration: | 420 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.9 | Result Flagging Label: | RIN:10 |

Fragment table for sample 3 : 1 Esx 4hr

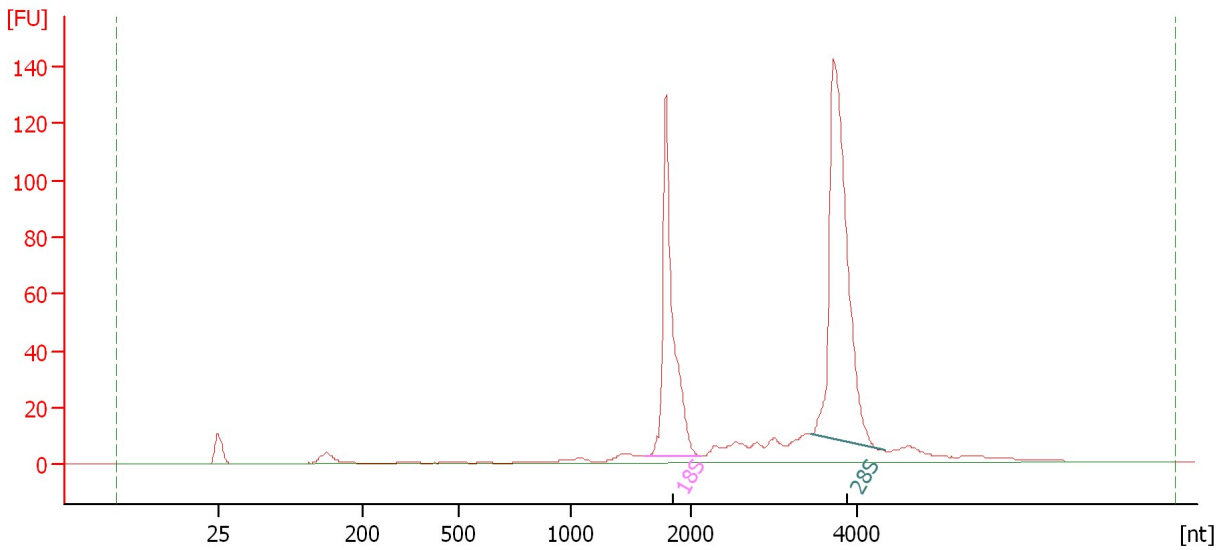
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,607 | 2,115 | 126.2 | 24.7 |
| 28S | 3,126 | 4,332 | 233.5 | 45.7 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...

1G 4hr [HiSeq 306 Total RNA QC]



Overall Results for sample 4 : 1G 4hr

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 593.4 | RNA Integrity Number (RIN): | 10 (B.02.08) |
| RNA Concentration: | 488 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.6 | Result Flagging Label: | RIN:10 |

Fragment table for sample 4 : 1G 4hr

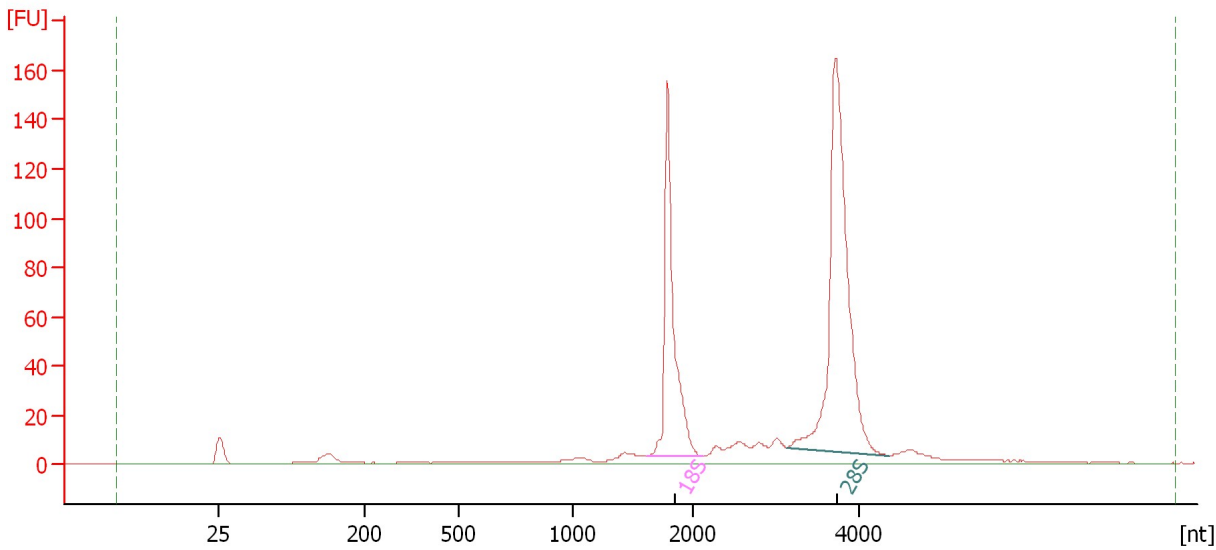
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,611 | 2,117 | 152.6 | 25.7 |
| 28S | 3,432 | 4,321 | 237.6 | 40.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...

1 G+Erd 4hr [HiSeq 306 Total RNA QC]



Overall Results for sample 5 : 1 G+Erd 4hr

RNA Area: 641.7 RNA Integrity Number (RIN): 9.9 (B.02.08)
RNA Concentration: 528 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 9.90

Fragment table for sample 5 : 1 G+Erd 4hr

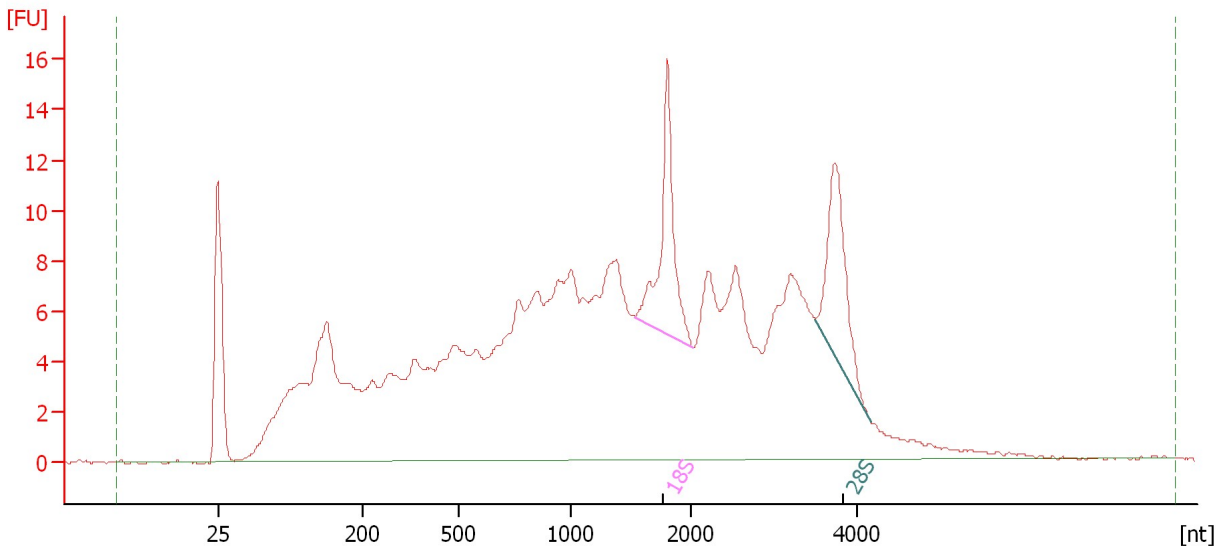
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,604 | 2,118 | 164.4 | 25.6 |
| 28S | 3,121 | 4,356 | 280.9 | 43.8 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...

1 LP 4hr [HiSeq 306 Total RNA QC]



Overall Results for sample 6 : 1 LP 4hr

RNA Area: 380.1 RNA Integrity Number (RIN): 4.7 (B.02.08)
RNA Concentration: 313 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.9 Result Flagging Label: RIN: 4.70

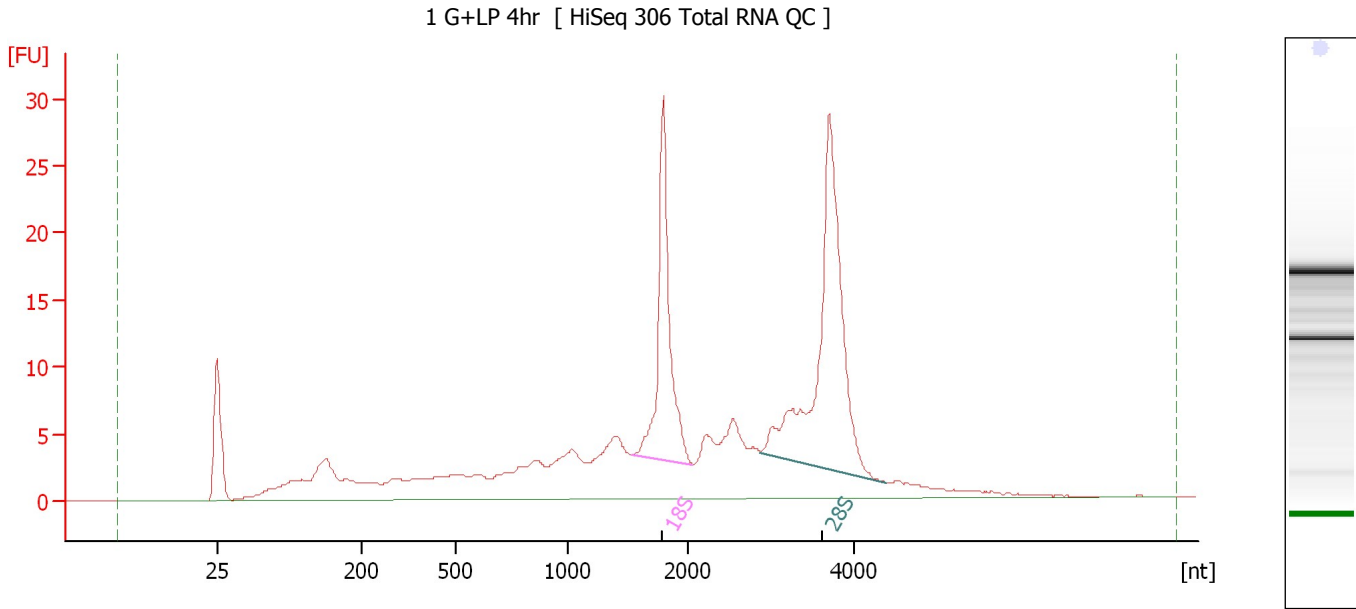
Fragment table for sample 6 : 1 LP 4hr

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,532 | 2,014 | 15.8 | 4.1 |
| 28S | 3,496 | 4,154 | 14.0 | 3.7 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 1 G+LP 4hr

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 279.9 | RNA Integrity Number (RIN): | 7.6 (B.02.08) |
| RNA Concentration: | 230 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.8 | Result Flagging Label: | RIN: 7.60 |

Fragment table for sample 7 : 1 G+LP 4hr

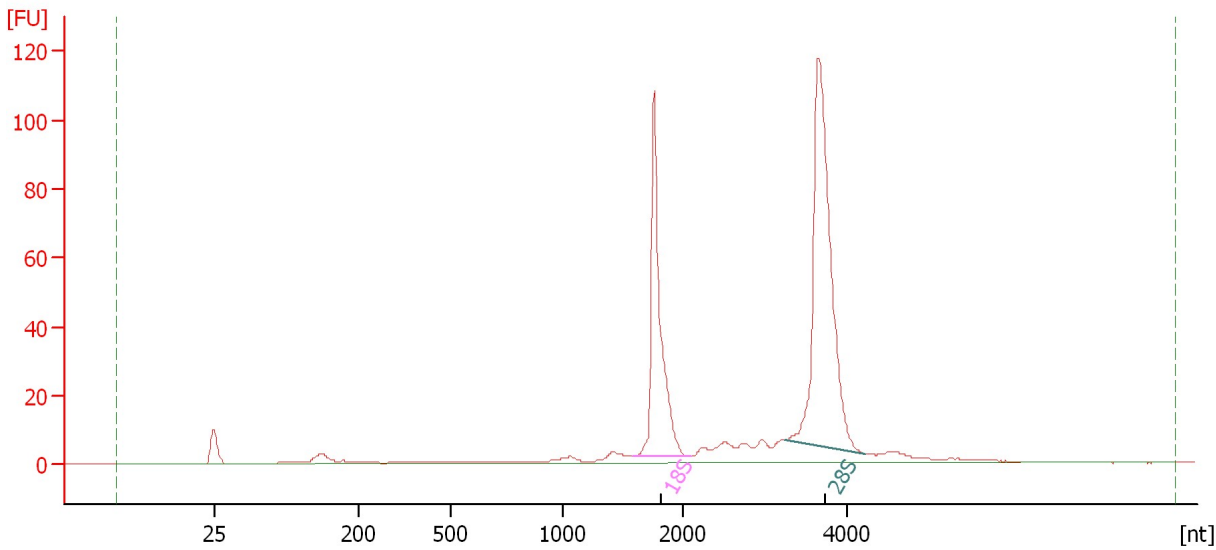
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,528 | 2,051 | 34.1 | 12.2 |
| 28S | 2,866 | 4,381 | 62.8 | 22.4 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...

1 U1 24hr [HiSeq 306 Total RNA QC]



Overall Results for sample 8 : 1 U1 24hr

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 460.0 | RNA Integrity Number (RIN): | 9.9 (B.02.08) |
| RNA Concentration: | 378 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.7 | Result Flagging Label: | RIN: 9.90 |

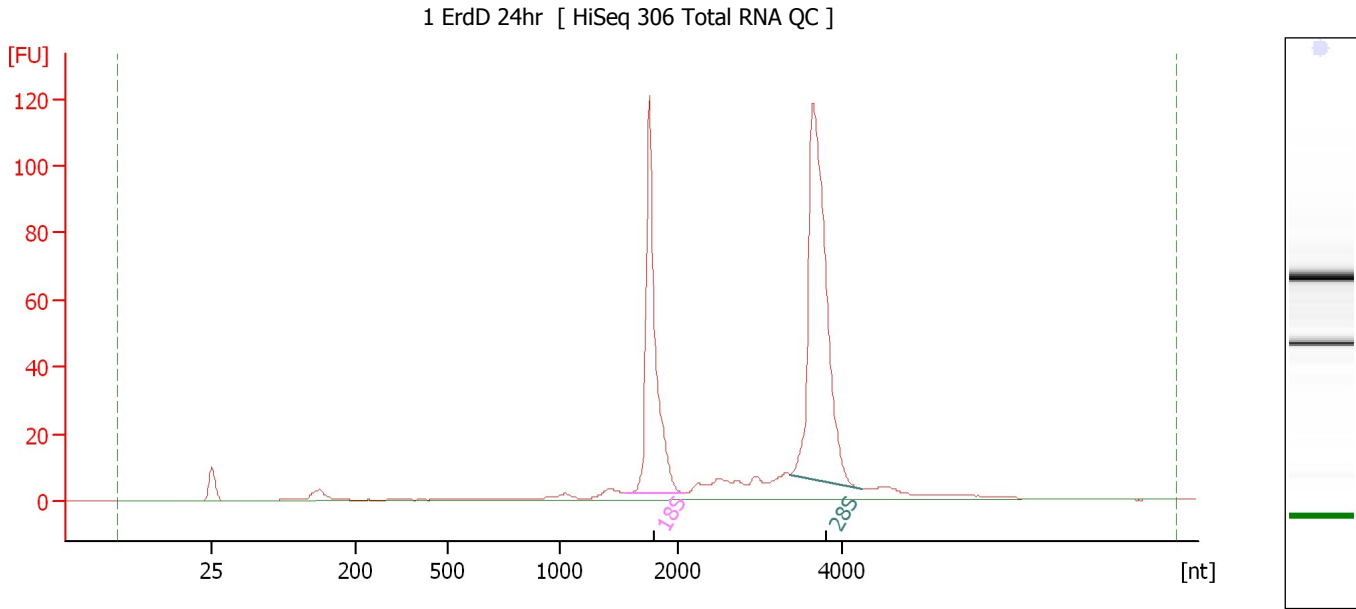
Fragment table for sample 8 : 1 U1 24hr

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,578 | 2,088 | 115.2 | 25.0 |
| 28S | 3,244 | 4,206 | 198.3 | 43.1 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 1 ErdD 24hr

RNA Area: 503.1 RNA Integrity Number (RIN): 9.8 (B.02.08)
RNA Concentration: 414 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.80

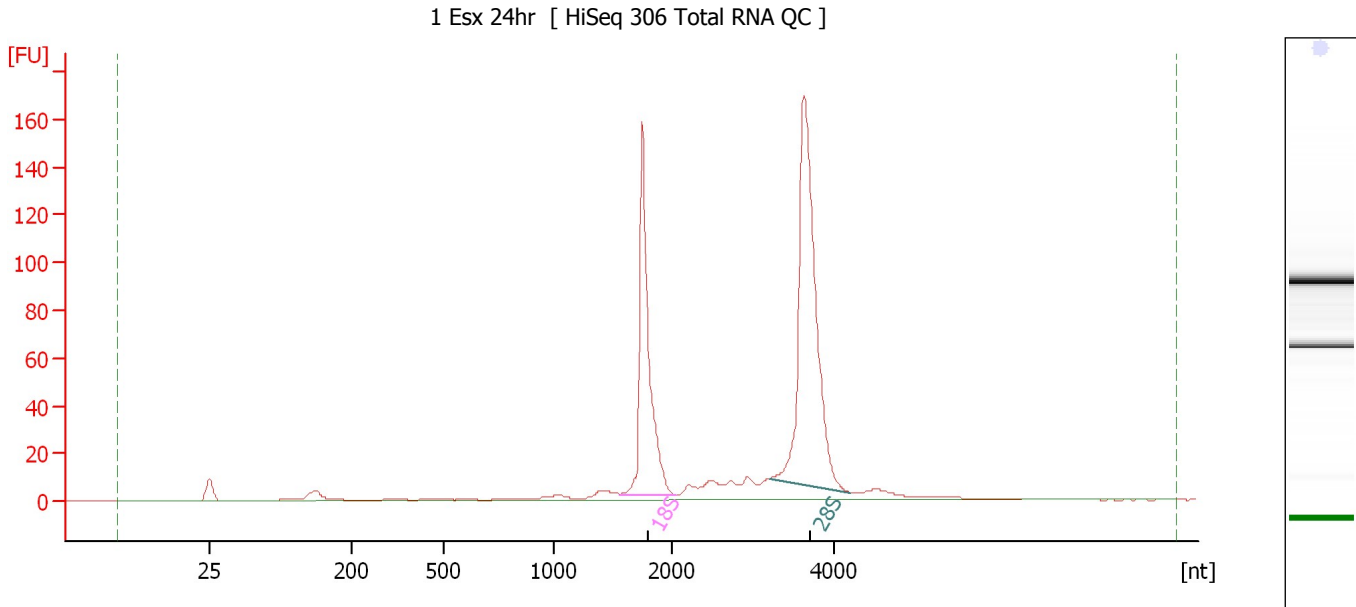
Fragment table for sample 9 : 1 ErdD 24hr

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,564 | 2,072 | 130.7 | 26.0 |
| 28S | 3,367 | 4,256 | 206.4 | 41.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 1 Esx 24hr

RNA Area: 641.9 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 528 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN:10

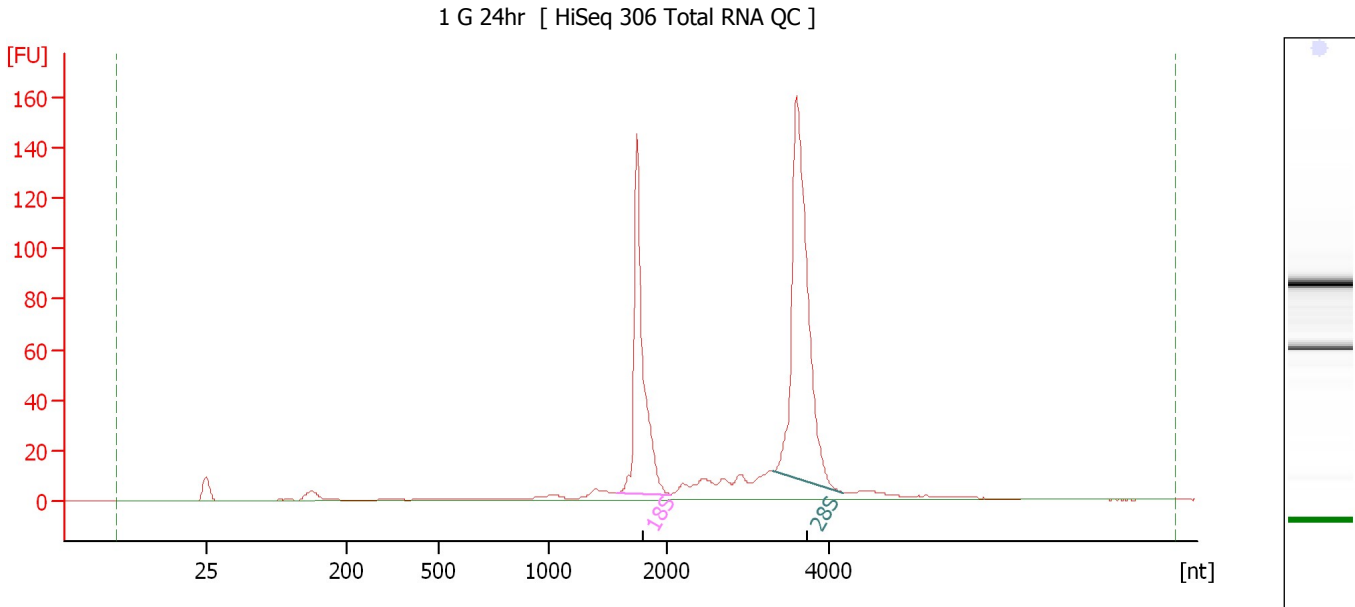
Fragment table for sample 10 : 1 Esx 24hr

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,559 | 2,042 | 167.1 | 26.0 |
| 28S | 3,201 | 4,201 | 280.0 | 43.6 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 1 G 24hr

RNA Area: 614.8 RNA Integrity Number (RIN): 9.9 (B.02.08)
RNA Concentration: 506 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.90

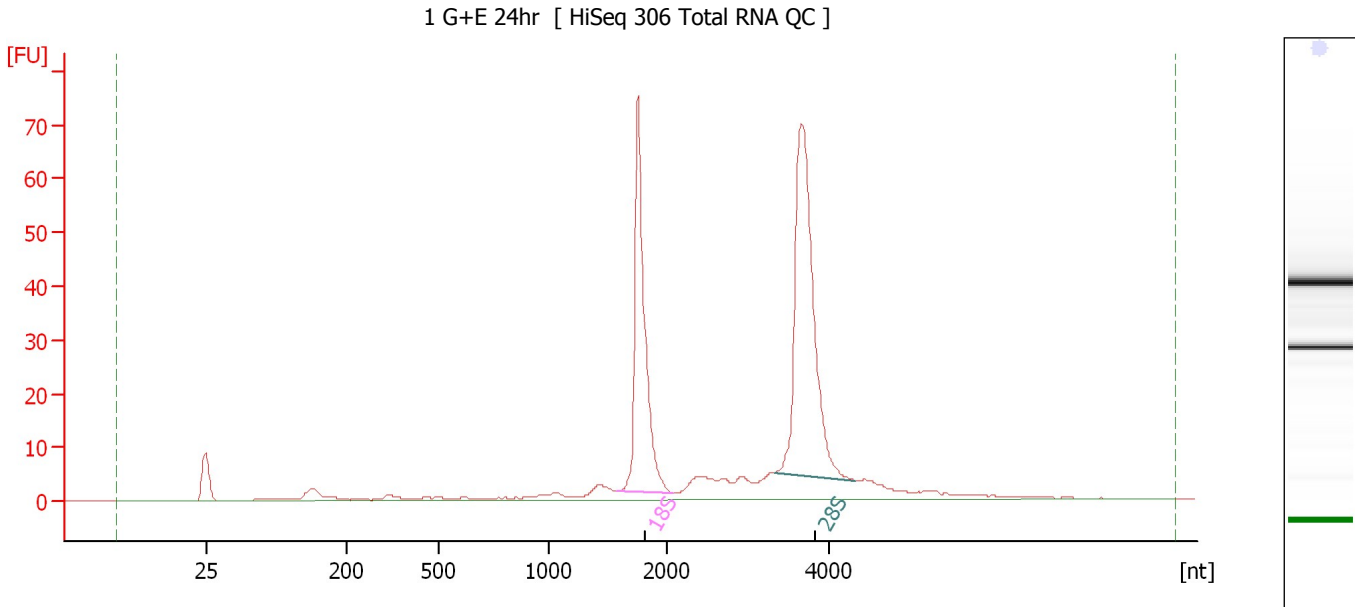
Fragment table for sample 11 : 1 G 24hr

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,565 | 2,040 | 156.5 | 25.5 |
| 28S | 3,309 | 4,181 | 249.9 | 40.6 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
 Modified: 11/23/2015 11:16:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 12 : 1 G+E 24hr

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 348.5 | RNA Integrity Number (RIN): | 9.7 (B.02.08) |
| RNA Concentration: | 287 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.4 | Result Flagging Label: | RIN: 9.70 |

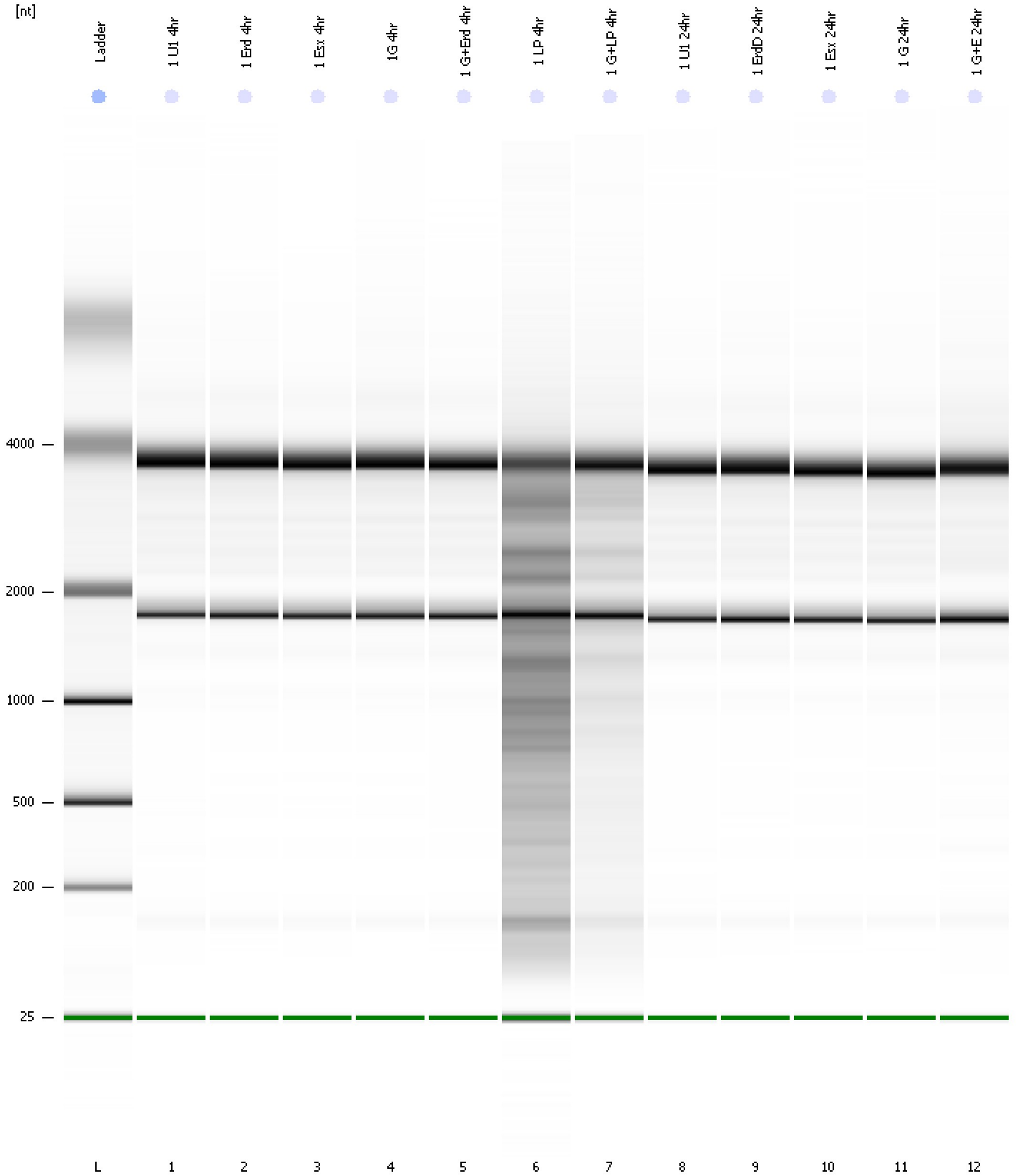
Fragment table for sample 12 : 1 G+E 24hr

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,574 | 2,080 | 88.6 | 25.4 |
| 28S | 3,322 | 4,327 | 126.0 | 36.2 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
Modified: 11/23/2015 11:16:49 AM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad

Created: 11/23/2015 10:53:46 AM
 Modified: 11/23/2015 11:16:49 AM

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 | | 11/23/2015 11:16:49 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-23\2015-11-23_002.xad) | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 11/23/2015 10:53:52 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |