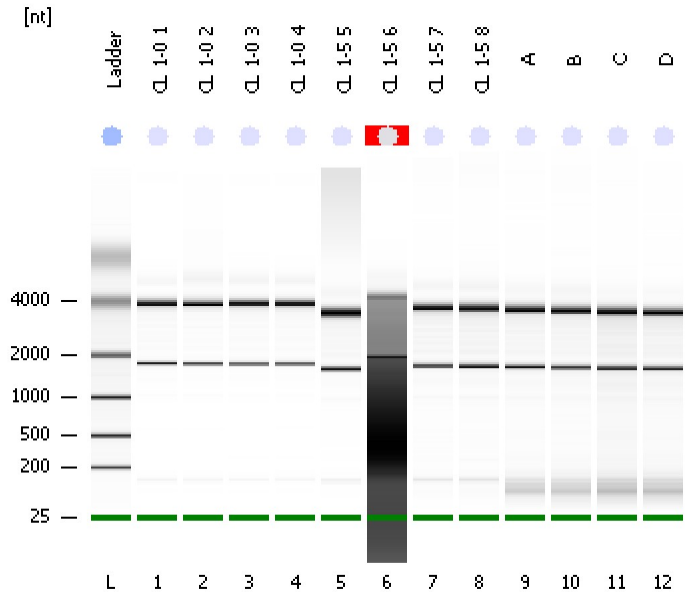


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electrophoresis File Run Summary



Instrument Information:

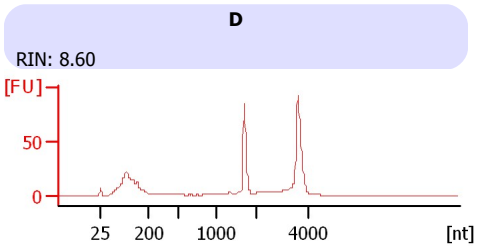
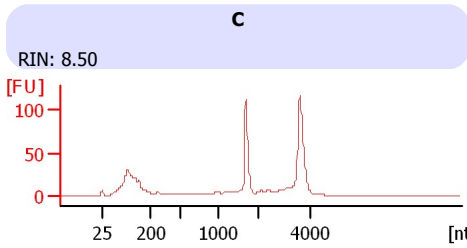
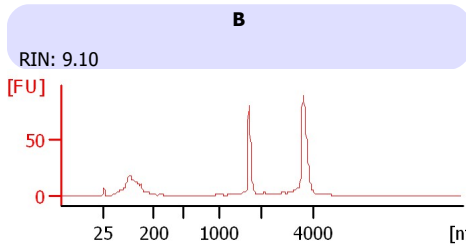
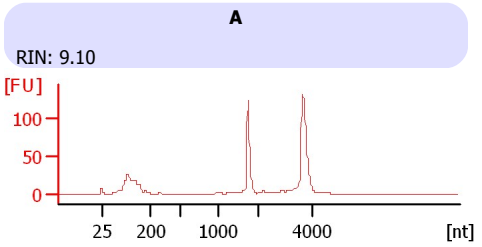
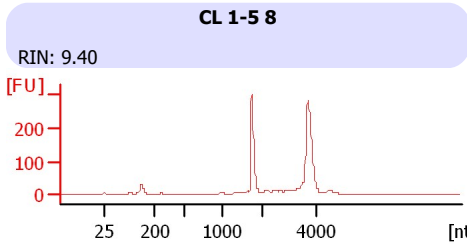
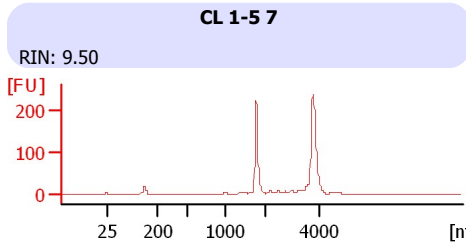
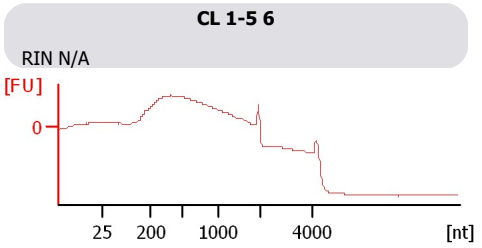
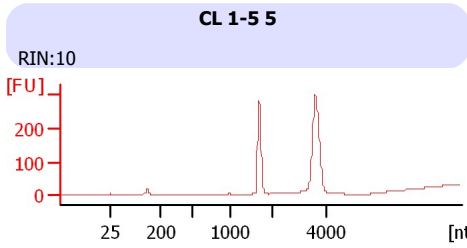
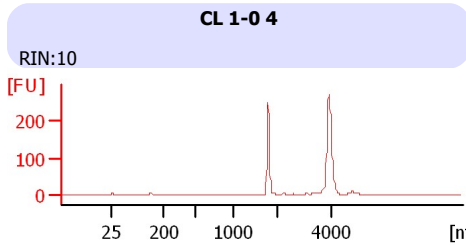
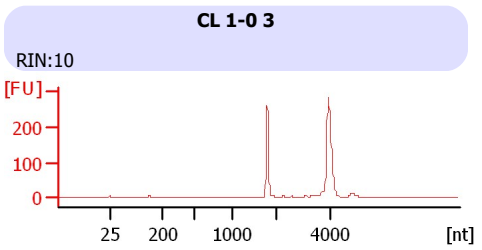
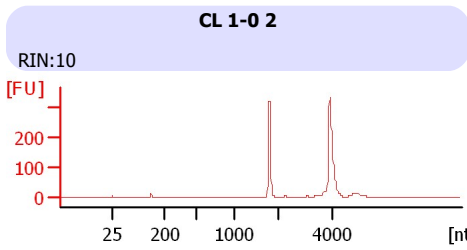
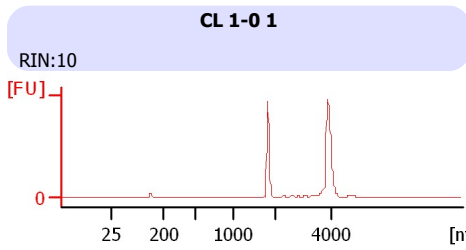
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

Assay Information:

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



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
 Modified: 11/14/2012 12:01:32 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|----------------|--------|-------------------|--------------|
| CL 1-0 1 | | ✓ | RIN:10 | |
| CL 1-0 2 | | ✓ | RIN:10 | |
| CL 1-0 3 | | ✓ | RIN:10 | |
| CL 1-0 4 | | ✓ | RIN:10 | |
| CL 1-5 5 | | ✓ | RIN:10 | |
| CL 1-5 6 | | ✓ | RIN N/A | |
| CL 1-5 7 | | ✓ | RIN: 9.50 | |
| CL 1-5 8 | | ✓ | RIN: 9.40 | |
| A | | ✓ | RIN: 9.10 | |
| B | | ✓ | RIN: 9.10 | |
| C | | ✓ | RIN: 8.50 | |
| D | | ✓ | RIN: 8.60 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 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

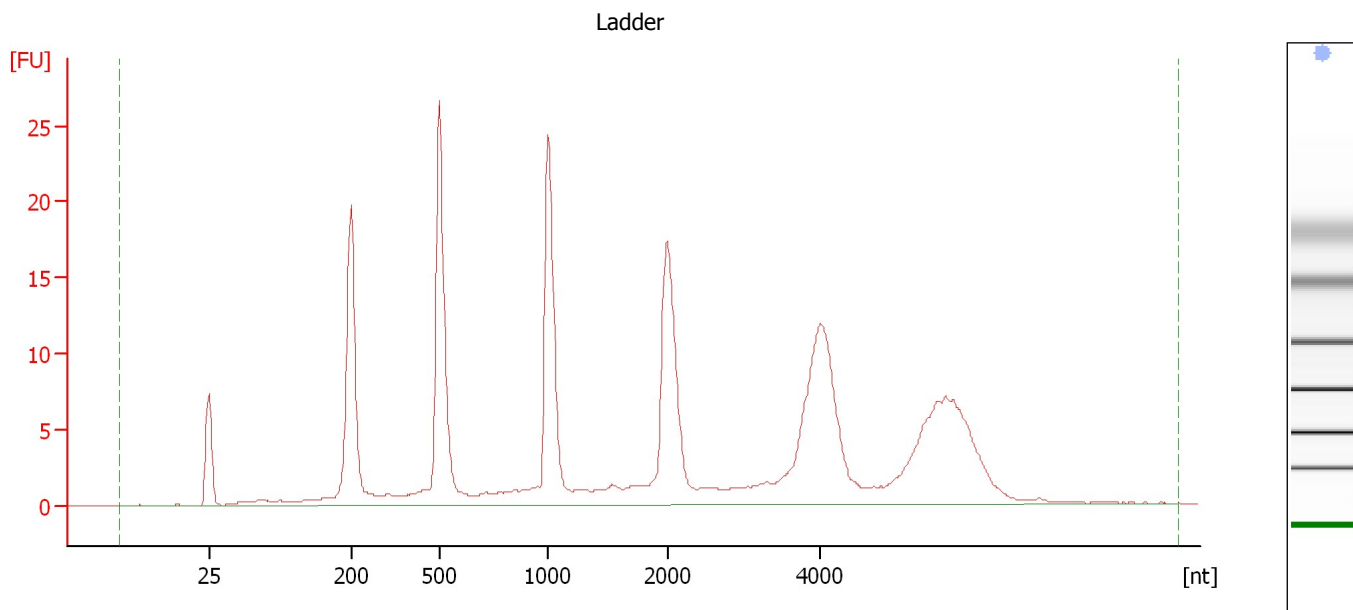
Ladder

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

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary



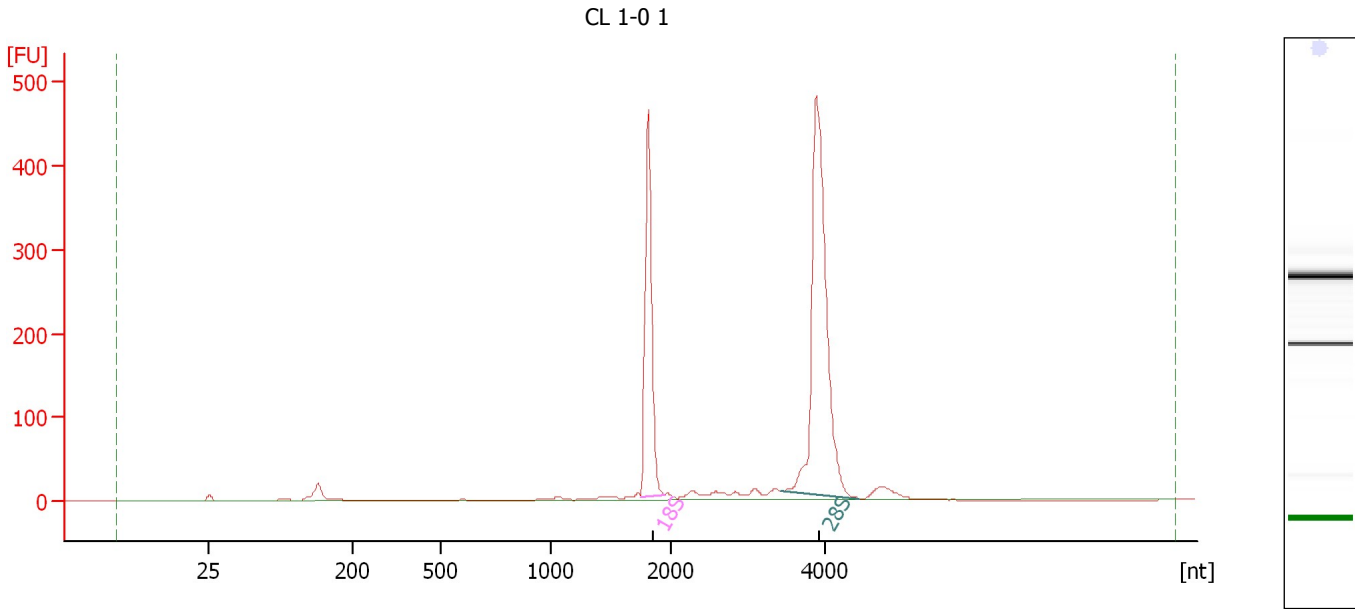
Overall Results for Ladder

| | | | |
|--------------------|-----------------|------------------------|---|
| RNA Area: | 248.5 | 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\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CL 1-0 1

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 1,329.7 | RNA Integrity Number (RIN): | 10 (B.02.08) |
| RNA Concentration: | 803 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.9 | Result Flagging Label: | RIN:10 |

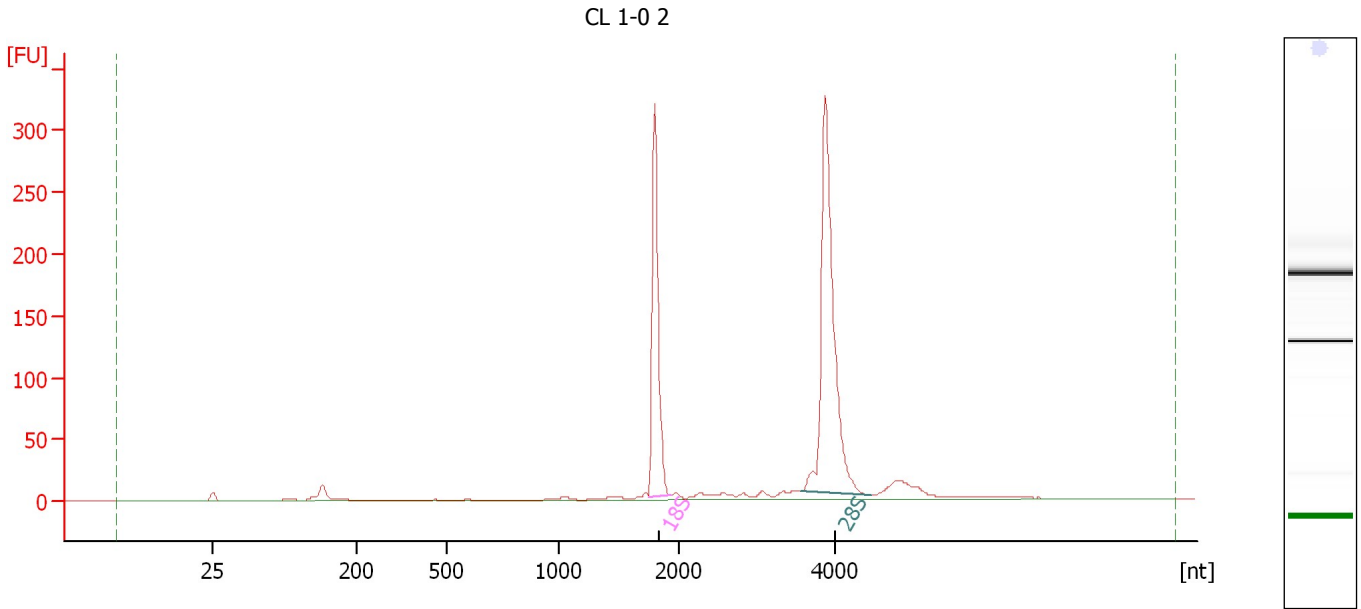
Fragment table for sample 1 : CL 1-0 1

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,751 | 1,948 | 358.1 | 26.9 |
| 28S | 3,439 | 4,446 | 696.5 | 52.4 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CL 1-0 2

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 870.4 | RNA Integrity Number (RIN): | 10 (B.02.08) |
| RNA Concentration: | 525 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.7 | Result Flagging Label: | RIN:10 |

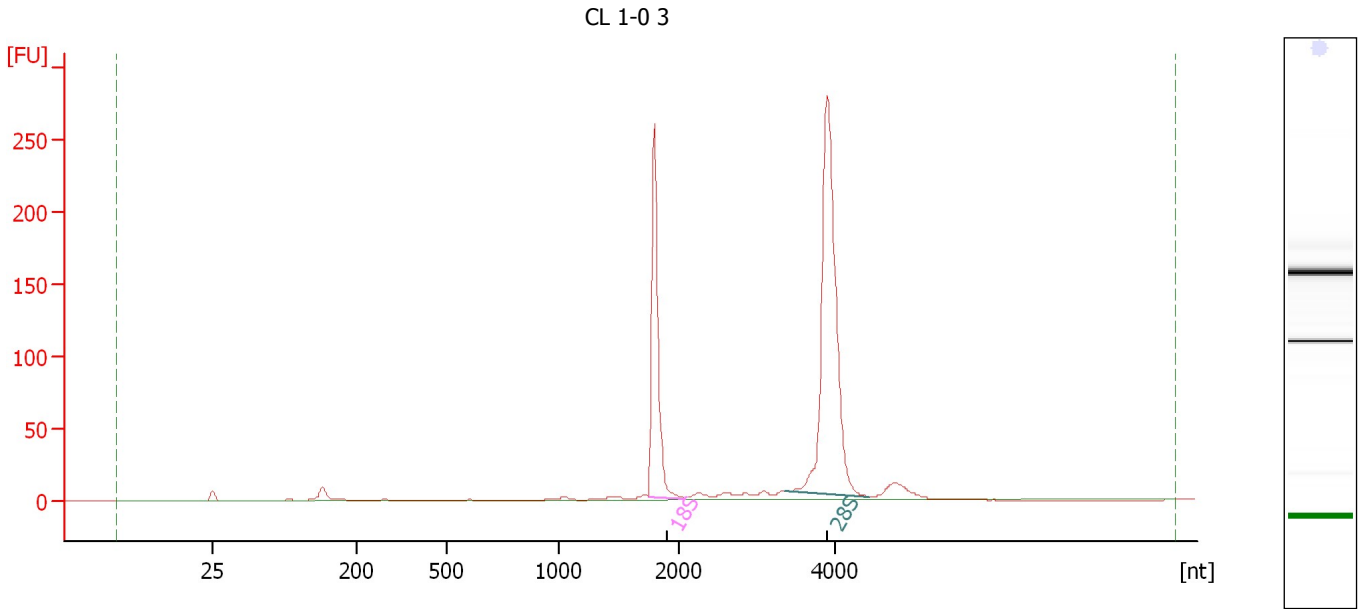
Fragment table for sample 2 : CL 1-0 2

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,748 | 1,934 | 239.4 | 27.5 |
| 28S | 3,569 | 4,458 | 405.8 | 46.6 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : CL 1-0 3

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 742.4 | RNA Integrity Number (RIN): | 10 (B.02.08) |
| RNA Concentration: | 448 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 2.0 | Result Flagging Label: | RIN:10 |

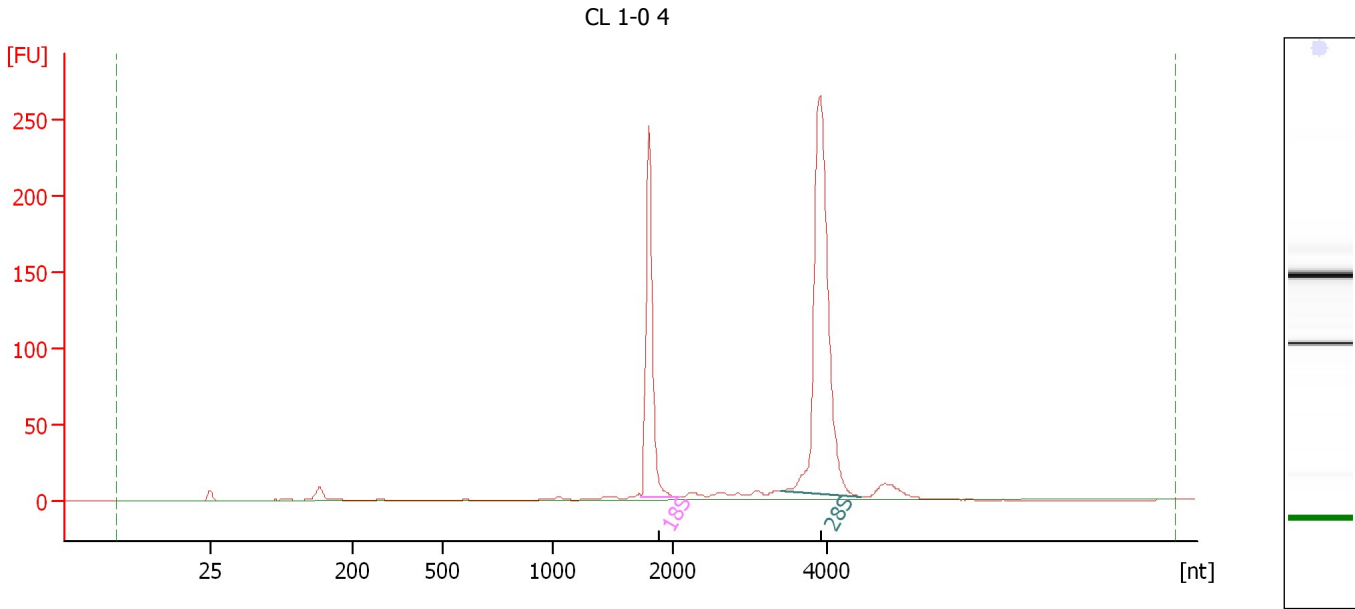
Fragment table for sample 3 : CL 1-0 3

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,748 | 2,077 | 201.0 | 27.1 |
| 28S | 3,377 | 4,431 | 397.3 | 53.5 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : CL 1-0 4

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 708.2 | RNA Integrity Number (RIN): | 10 (B.02.08) |
| RNA Concentration: | 427 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 2.0 | Result Flagging Label: | RIN:10 |

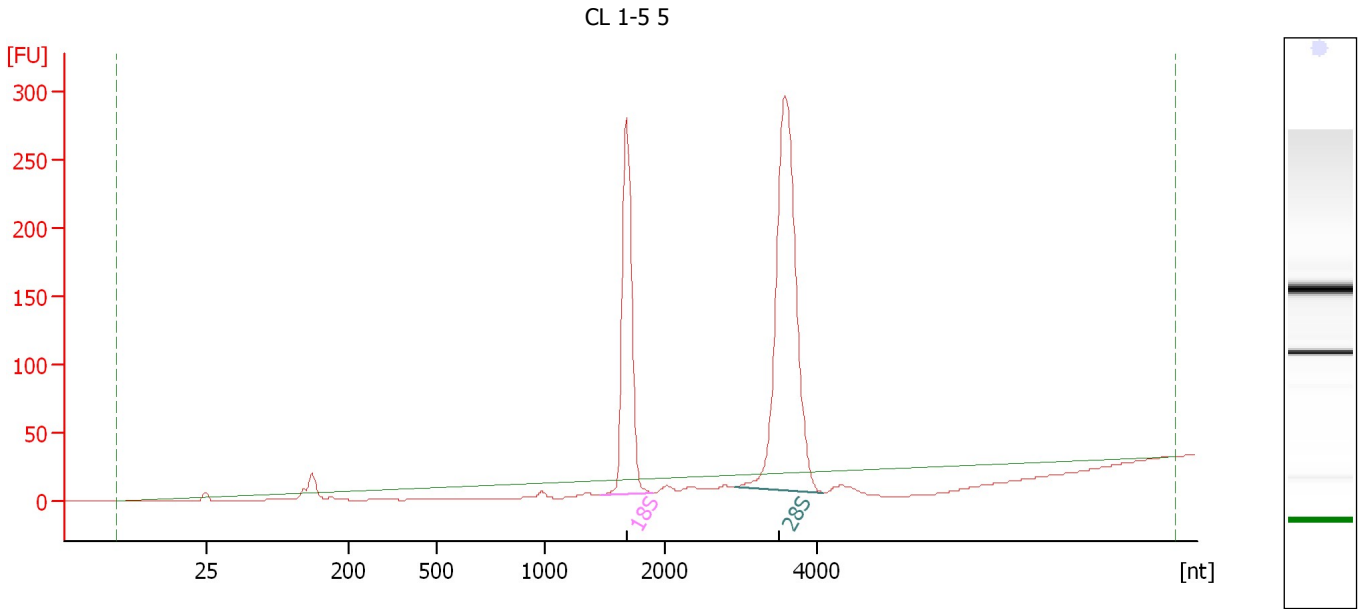
Fragment table for sample 4 : CL 1-0 4

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,744 | 2,073 | 191.4 | 27.0 |
| 28S | 3,409 | 4,442 | 376.4 | 53.2 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : CL 1-5 5

RNA Area: 854.6 RNA Integrity Number (RIN): 10 (B.02.08)
RNA Concentration: 516 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.9 Result Flagging Label: RIN:10

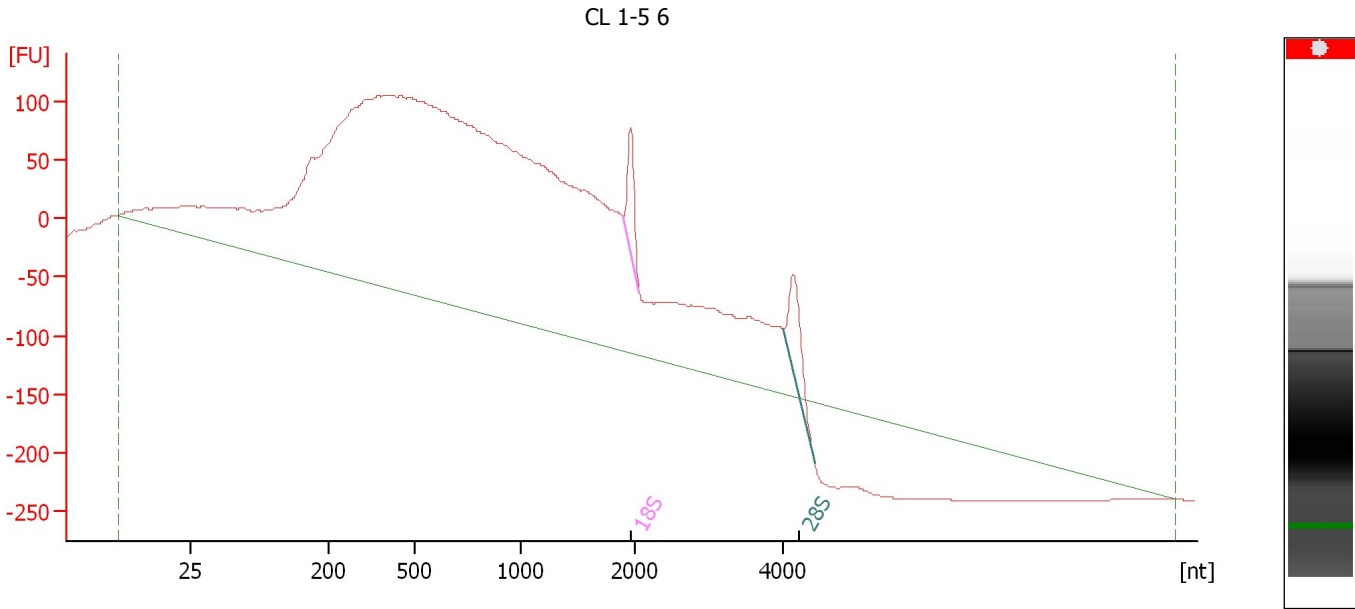
Fragment table for sample 5 : CL 1-5 5

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,468 | 1,909 | 327.3 | 38.3 |
| 28S | 2,916 | 4,069 | 617.0 | 72.2 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
 Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : CL 1-5 6

| | | | |
|-------------------------|-------------|-----------------------------|---|
| RNA Area: | 7,889.1 | RNA Integrity Number (RIN): | N/A (B.02.08) |
| RNA Concentration: | 4,762 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.4 | Result Flagging Label: | RIN N/A |

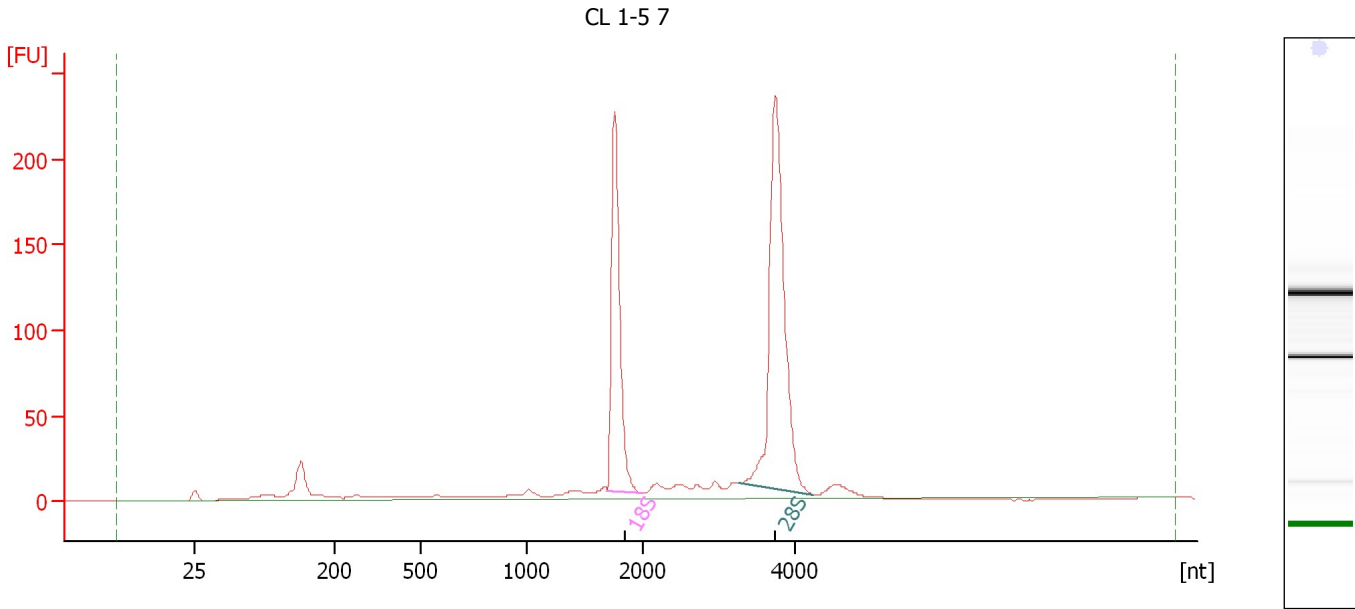
Fragment table for sample 6 : CL 1-5 6

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,903 | 2,066 | 79.4 | 1.0 |
| 28S | 4,002 | 4,418 | 110.2 | 1.4 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CL 1-5 7

RNA Area: 892.6 RNA Integrity Number (RIN): 9.5 (B.02.08)
RNA Concentration: 539 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.50

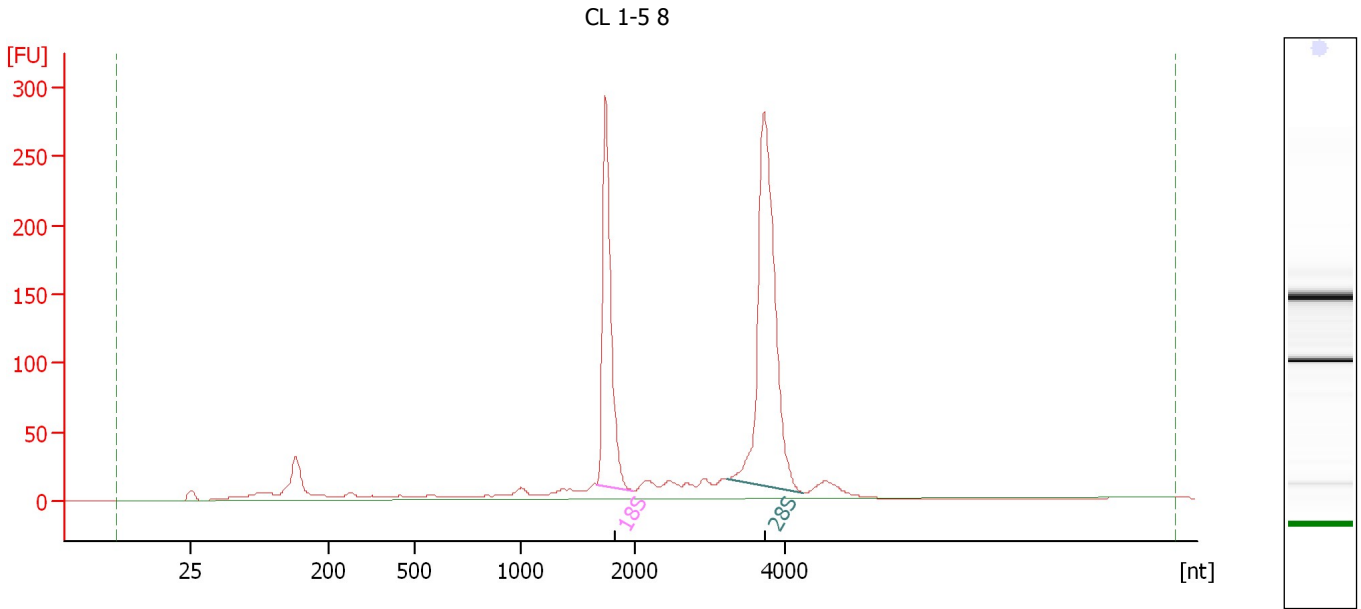
Fragment table for sample 7 : CL 1-5 7

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,687 | 1,991 | 220.4 | 24.7 |
| 28S | 3,263 | 4,242 | 362.7 | 40.6 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : CL 1-5 8

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 1,315.6 | RNA Integrity Number (RIN): | 9.4 (B.02.08) |
| RNA Concentration: | 794 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.6 | Result Flagging Label: | RIN: 9.40 |

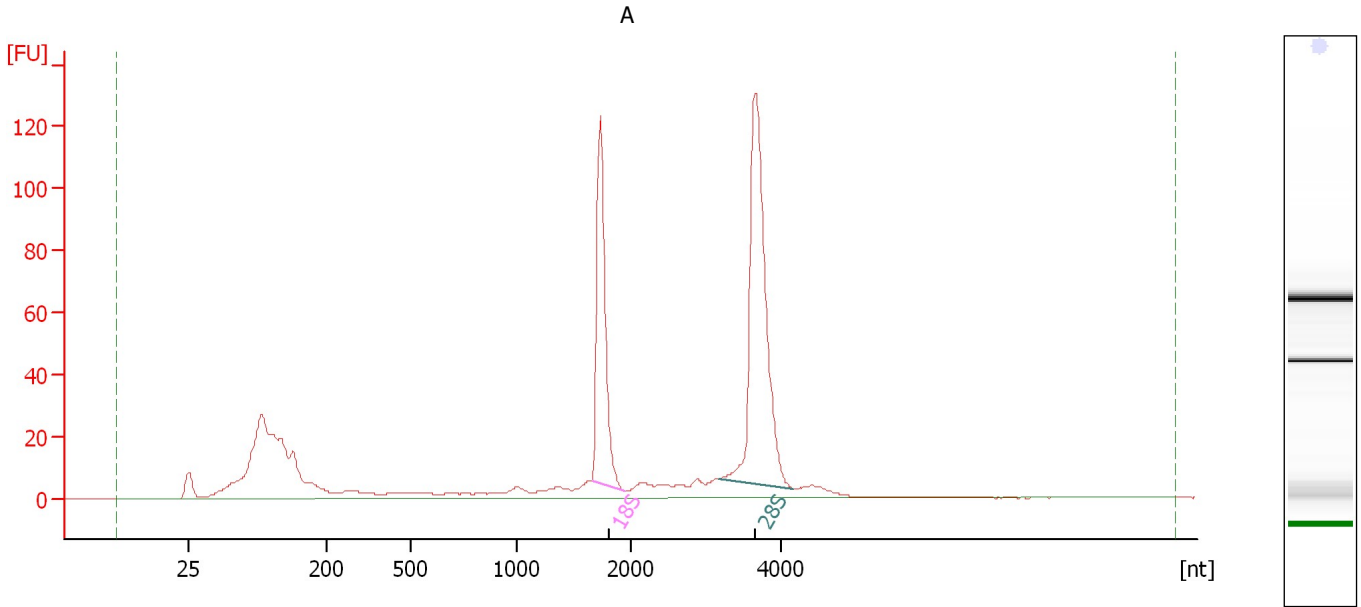
Fragment table for sample 8 : CL 1-5 8

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,672 | 1,978 | 311.0 | 23.6 |
| 28S | 3,226 | 4,242 | 500.7 | 38.1 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : A

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 732.6 | RNA Integrity Number (RIN): | 9.1 (B.02.08) |
| RNA Concentration: | 442 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.7 | Result Flagging Label: | RIN: 9.10 |

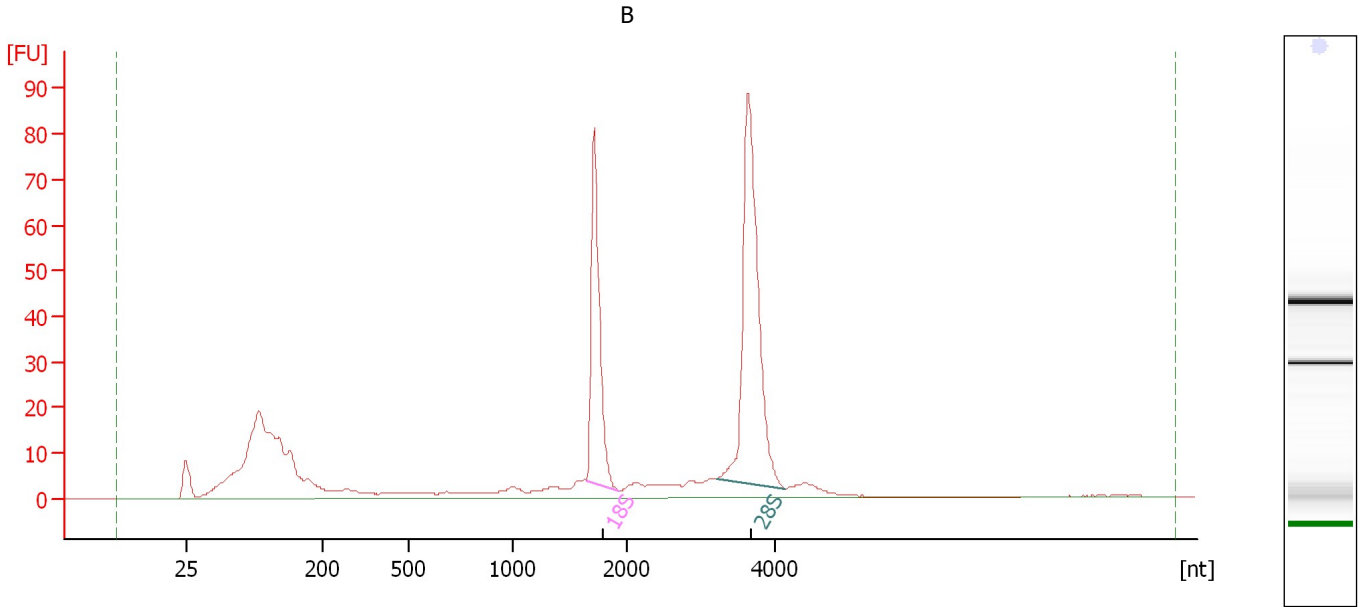
Fragment table for sample 9 : A

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,659 | 1,939 | 122.9 | 16.8 |
| 28S | 3,186 | 4,163 | 212.7 | 29.0 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
 Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : B

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 526.0 | RNA Integrity Number (RIN): | 9.1 (B.02.08) |
| RNA Concentration: | 318 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.8 | Result Flagging Label: | RIN: 9.10 |

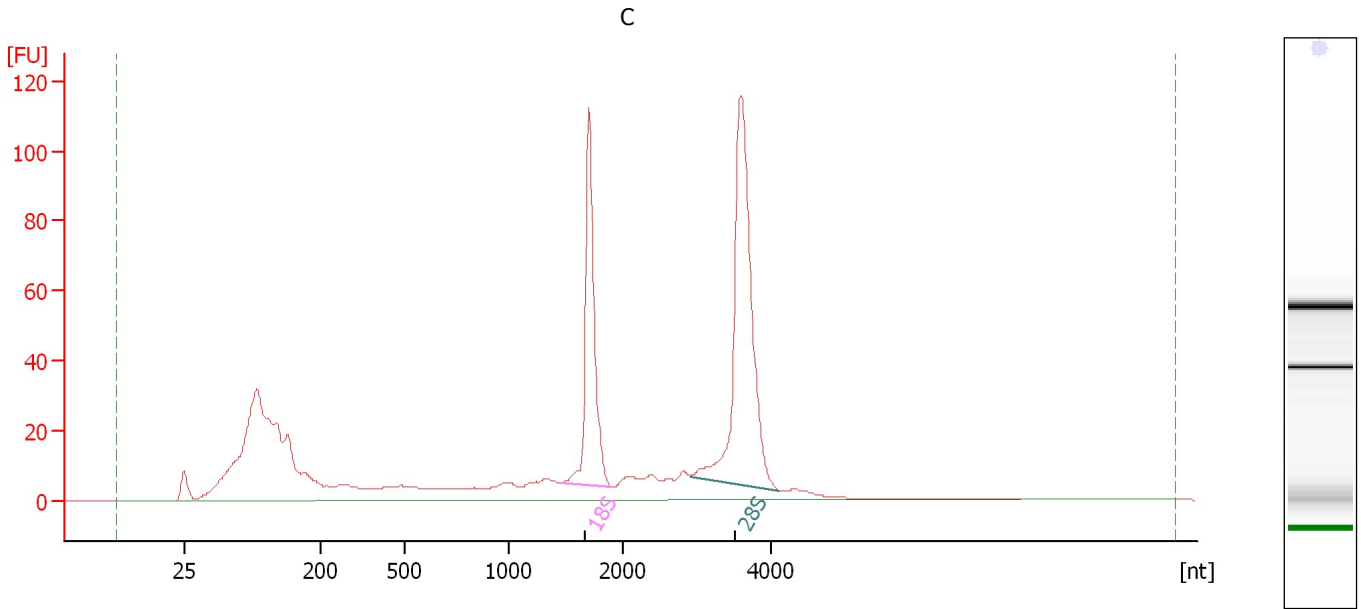
Fragment table for sample 10 : B

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,637 | 1,918 | 81.0 | 15.4 |
| 28S | 3,203 | 4,141 | 142.3 | 27.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : C

RNA Area: 889.5 RNA Integrity Number (RIN): 8.5 (B.02.08)
RNA Concentration: 537 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 8.50

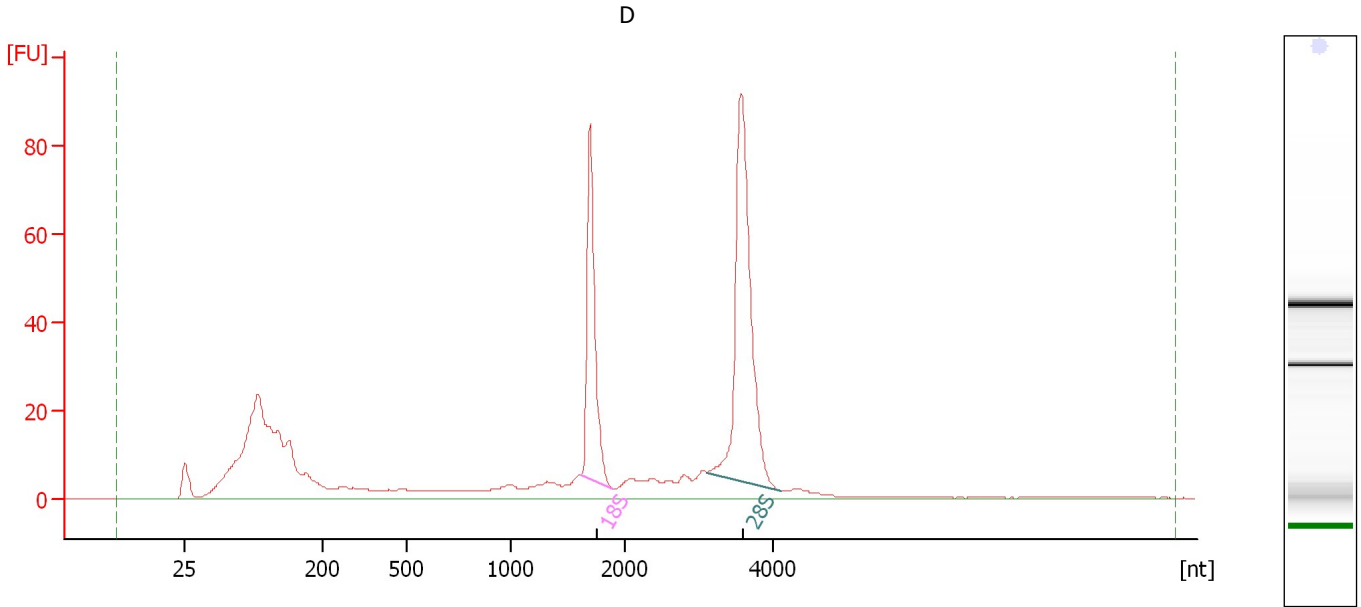
Fragment table for sample 11 : C

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,446 | 1,897 | 125.6 | 14.1 |
| 28S | 2,915 | 4,104 | 208.9 | 23.5 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 12 : D

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 610.1 | RNA Integrity Number (RIN): | 8.6 (B.02.08) |
| RNA Concentration: | 368 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.7 | Result Flagging Label: | RIN: 8.60 |

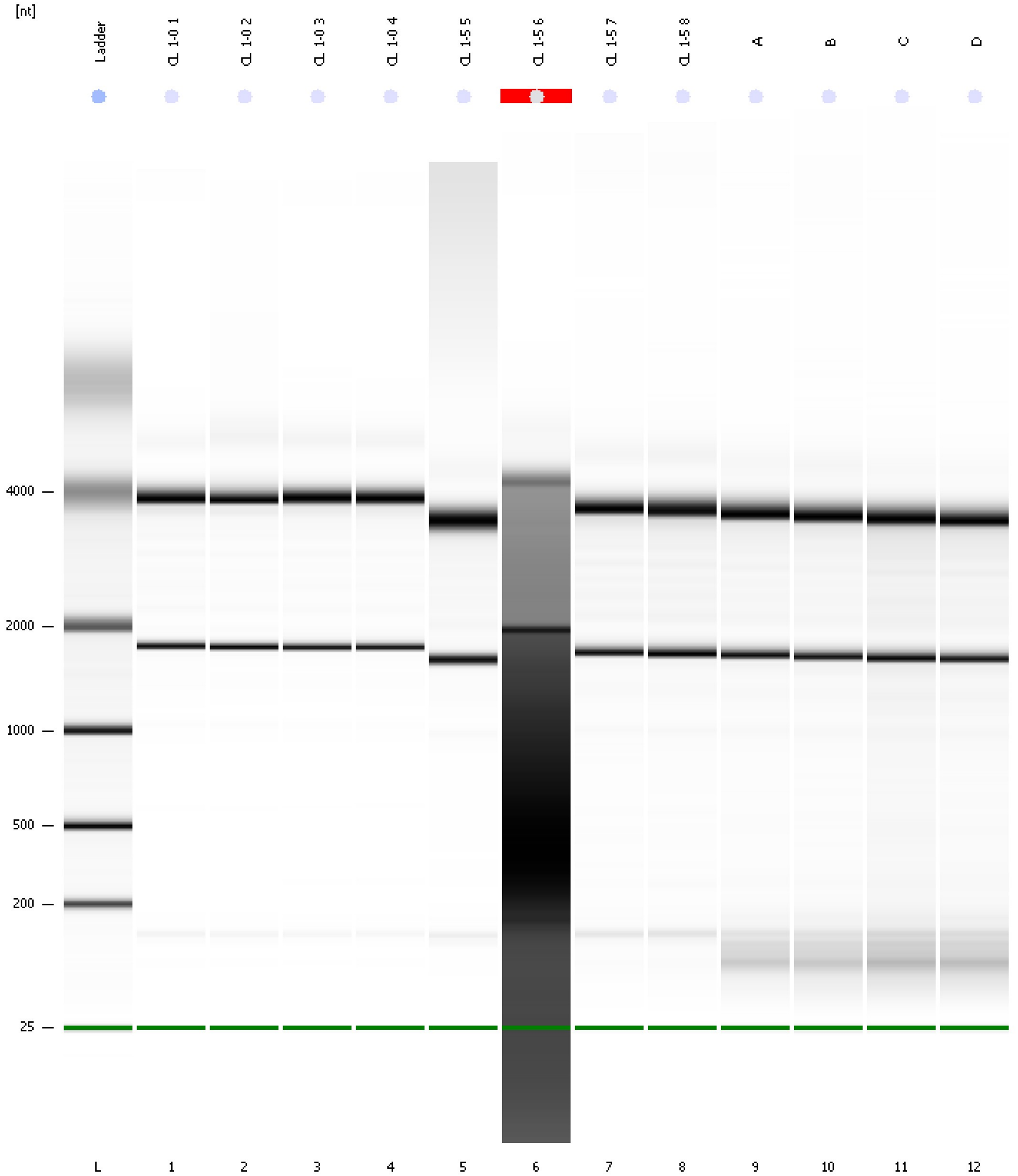
Fragment table for sample 12 : D

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,617 | 1,889 | 83.2 | 13.6 |
| 28S | 3,103 | 4,116 | 143.8 | 23.6 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
Modified: 11/14/2012 12:01:32 PM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad

Created: 11/14/2012 11:37:40 AM
 Modified: 11/14/2012 12:01:32 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 | | 11/14/2012 12:01:30 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-11-14\2012-11-14_003.xad) | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 11/14/2012 11:37:46 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |