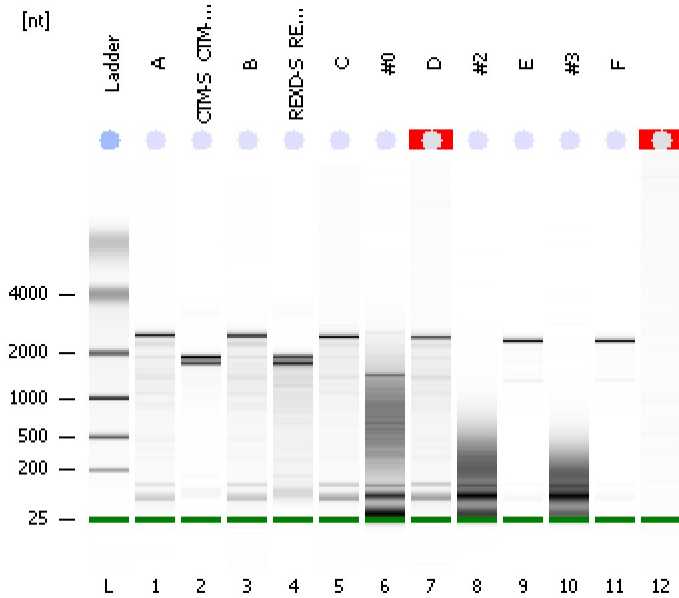


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electrophoresis File Run Summary



Instrument Information:

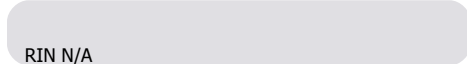
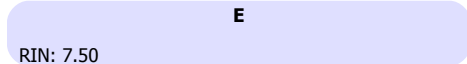
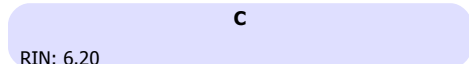
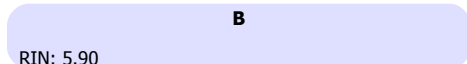
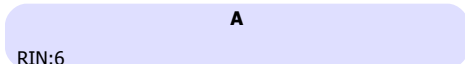
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
 Modified: 4/16/2012 10:26:01 AM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|----------------------|----------------|--------|-------------------|--------------|
| A | | ✓ | RIN:6 | |
| CTM-S & CTM-B Pool | | ✓ | RIN: 6.40 | |
| B | | ✓ | RIN: 5.90 | |
| REXD-S & REXD-B Pool | | ✓ | RIN: 4.50 | |
| C | | ✓ | RIN: 6.20 | |
| #0 | | ✓ | RIN: 2.60 | |
| D | | ✓ | RIN N/A | |
| #2 | | ✓ | RIN: 2.20 | |
| E | | ✓ | RIN: 7.50 | |
| #3 | | ✓ | RIN: 2.30 | |
| F | | ✓ | RIN: 7.40 | |
| Ladder | | ✓ | RIN N/A | |
| | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 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

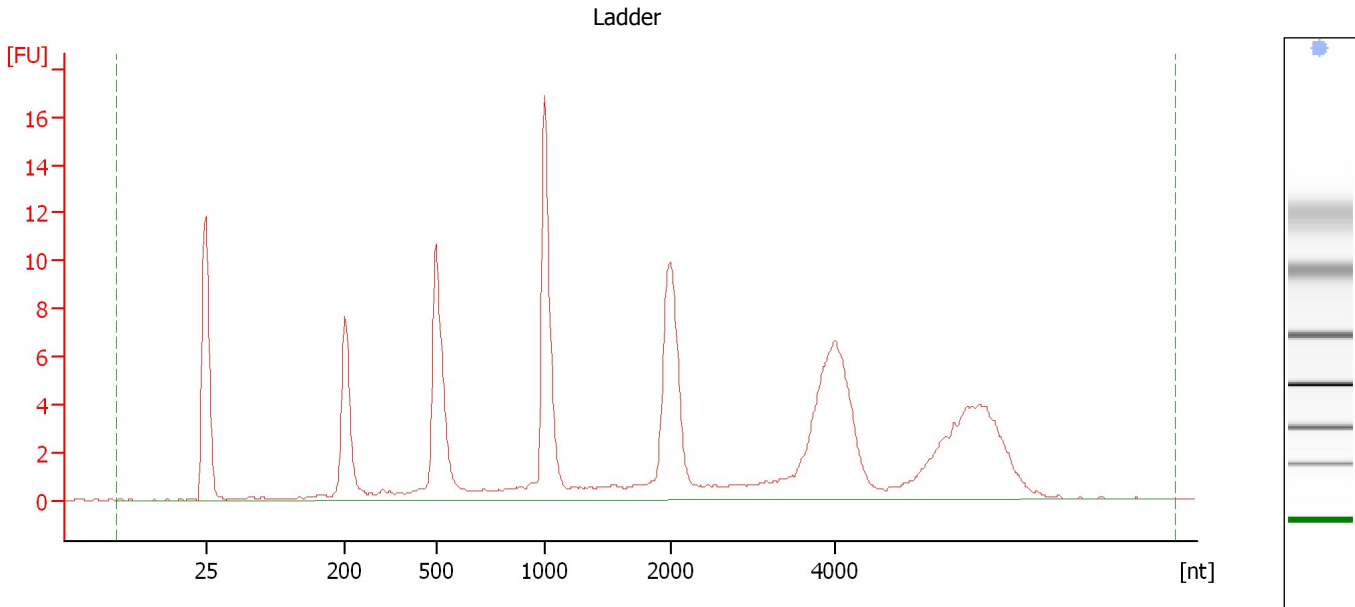
Ladder

| 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\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary



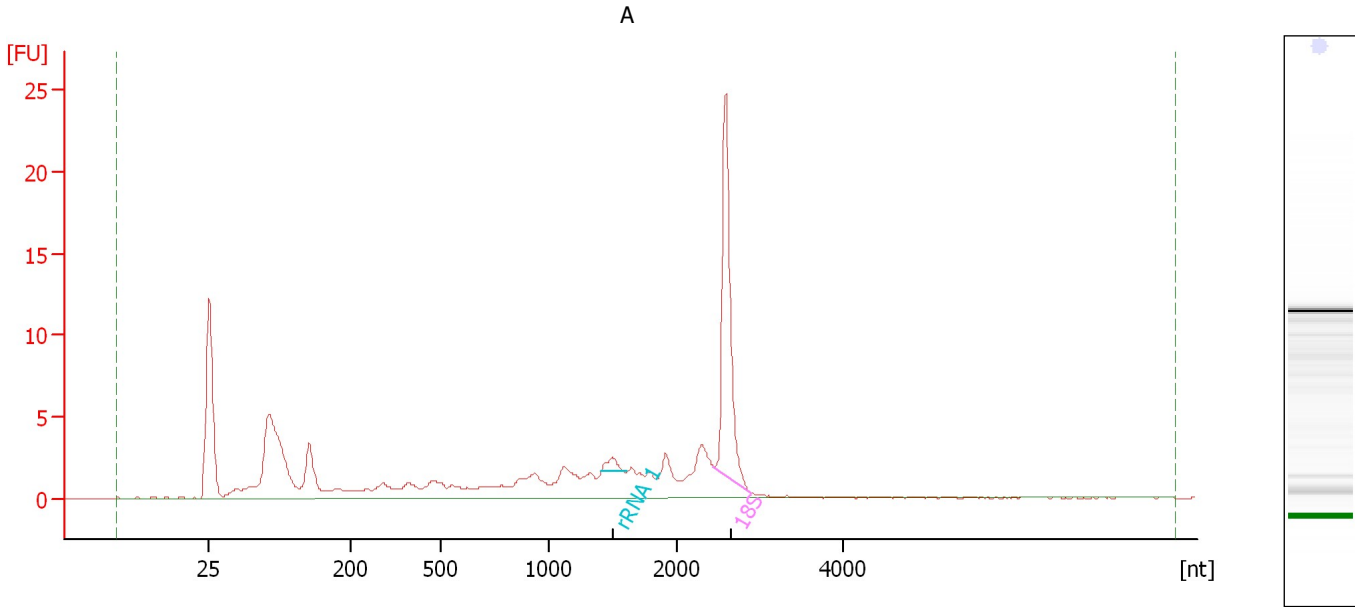
Overall Results for Ladder

| | | | |
|--------------------|-----------|------------------------|---|
| RNA Area: | 139.2 | Result Flagging Color: | |
| RNA Concentration: | 150 ng/μl | Result Flagging Label: | All Other Samples |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : A

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 103.6 | RNA Integrity Number (RIN): | 6 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 112 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN:6 |

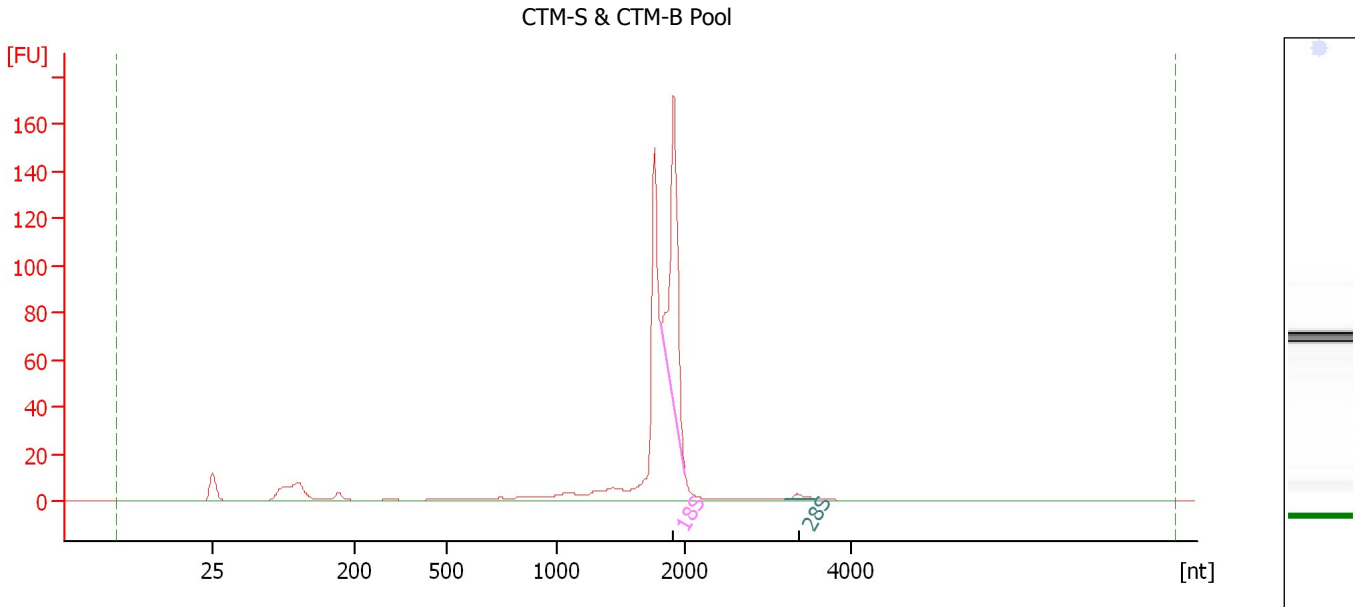
Fragment table for sample 1 : A

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|--------|-----------------|---------------|------|-----------------|
| rRNA 1 | 1,406 | 1,608 | 1.2 | 1.2 |
| 18S | 2,446 | 2,898 | 20.1 | 19.4 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
 Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CTM-S & CTM-B Pool

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 479.6 | RNA Integrity Number (RIN): | 6.4 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 517 ng/μl | | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Color: | |
| | | Result Flagging Label: | RIN: 6.40 |

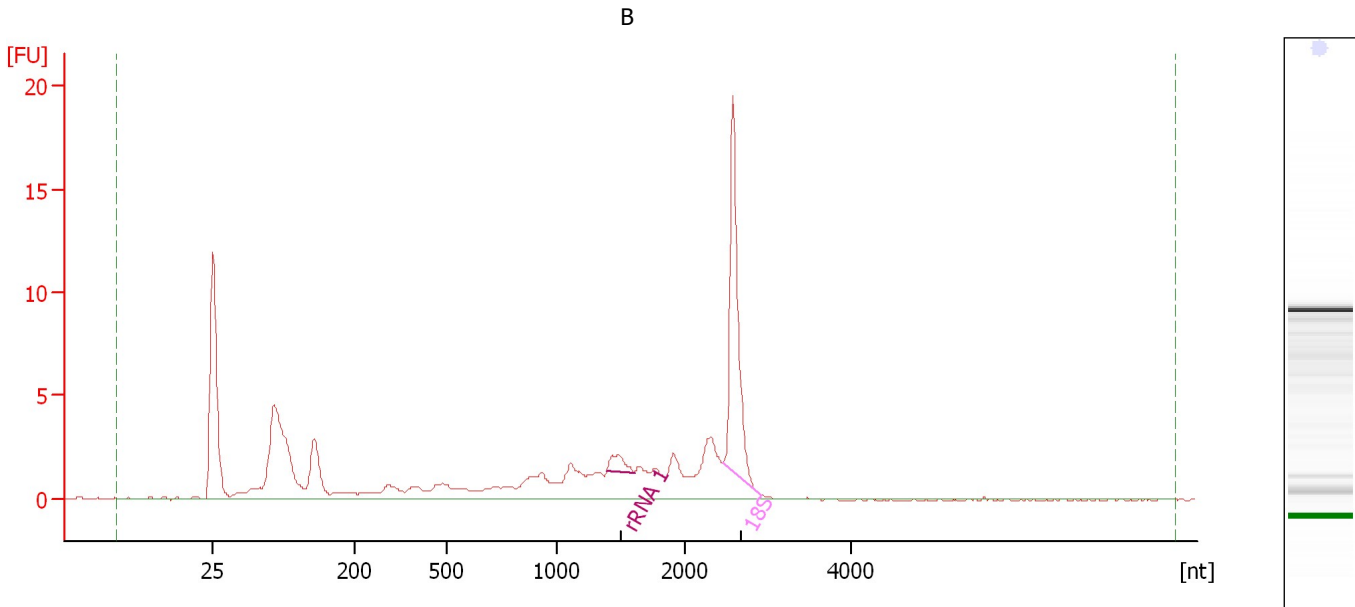
Fragment table for sample 2 : CTM-S & CTM-B Pool

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,812 | 2,007 | 110.5 | 23.0 |
| 28S | 3,210 | 3,568 | 2.3 | 0.5 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : B

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 84.9 | RNA Integrity Number (RIN): | 5.9 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 91 ng/μl | | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Color: | |
| | | Result Flagging Label: | RIN: 5.90 |

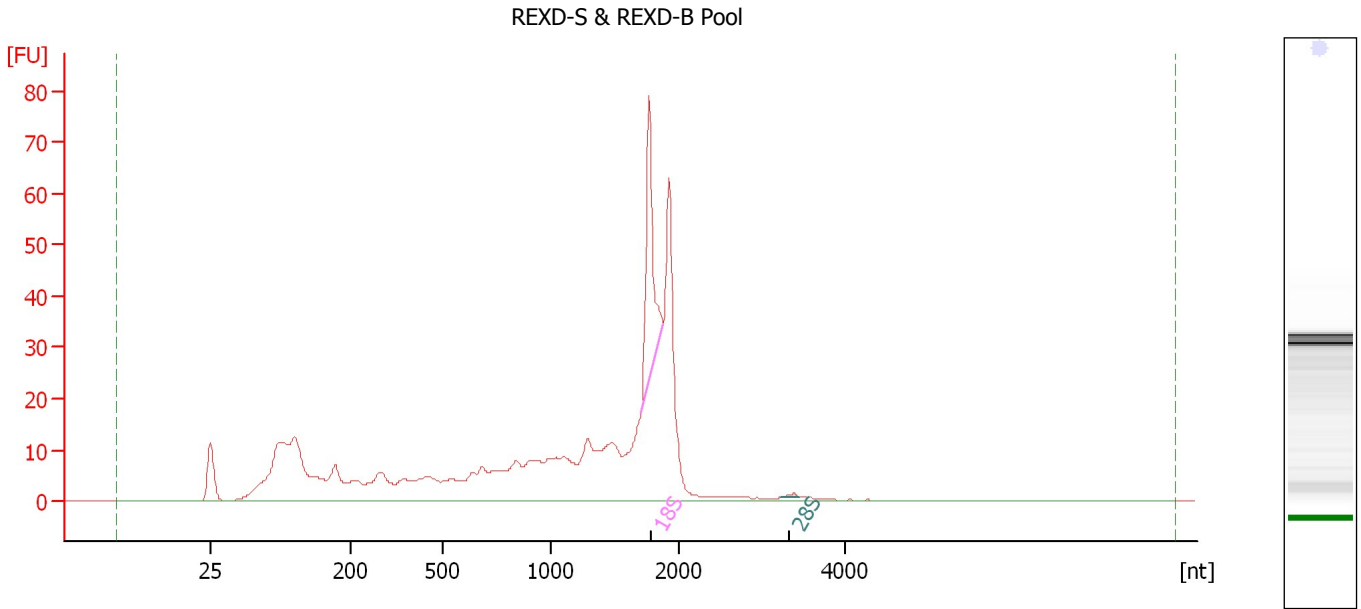
Fragment table for sample 3 : B

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|--------|-----------------|---------------|------|-----------------|
| rRNA 1 | 1,393 | 1,608 | 1.3 | 1.5 |
| 18S | 2,462 | 2,915 | 16.2 | 19.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : REXD-S & REXD-B Pool

RNA Area: 528.1 RNA Integrity Number (RIN): 4.5 (B.02.08)
RNA Concentration: 569 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.0 Result Flagging Label: RIN: 4.50

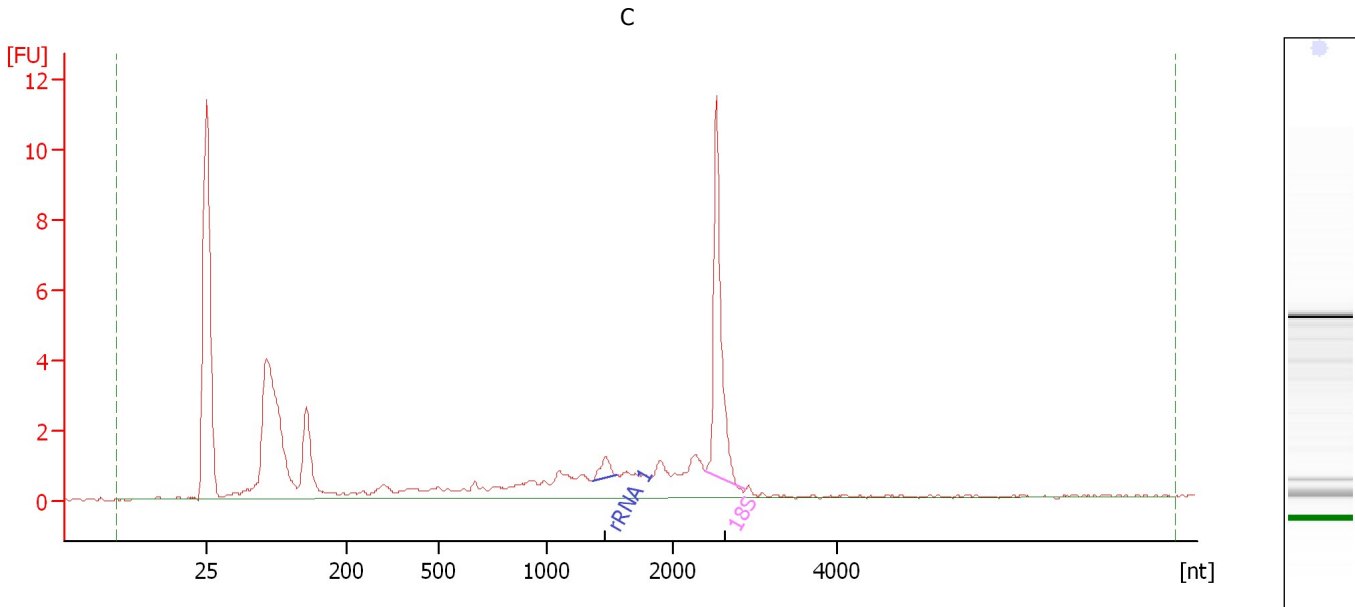
Fragment table for sample 4 : REXD-S & REXD-B Pool

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,708 | 1,876 | 44.9 | 8.5 |
| 28S | 3,227 | 3,459 | 0.6 | 0.1 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : C

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 52.7 | RNA Integrity Number (RIN): | 6.2 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 57 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 6.20 |

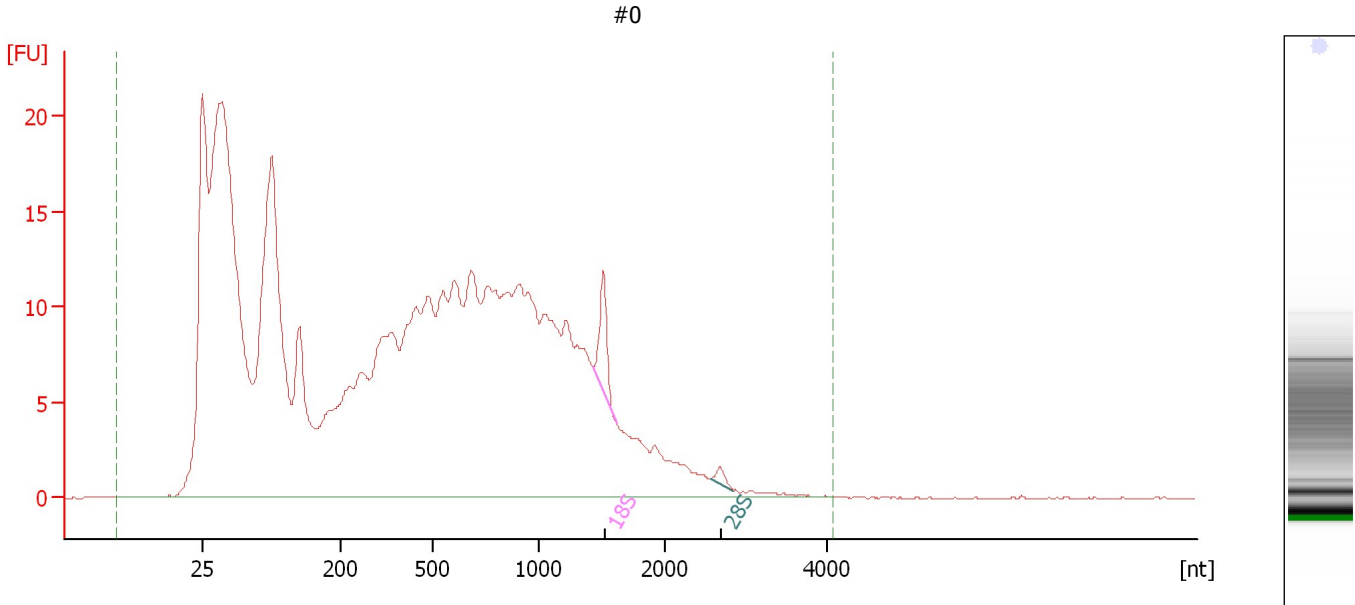
Fragment table for sample 5 : C

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|--------|-----------------|---------------|------|-----------------|
| rRNA 1 | 1,374 | 1,561 | 0.7 | 1.4 |
| 18S | 2,402 | 2,880 | 9.0 | 17.1 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
 Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : #0

End Analysis Time Range [s] : 53

Overall Results for sample 6 : #0

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 573.3 | RNA Integrity Number (RIN): | 2.6 (B.02.08) |
| RNA Concentration: | 618 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.1 | Result Flagging Label: | RIN: 2.60 |

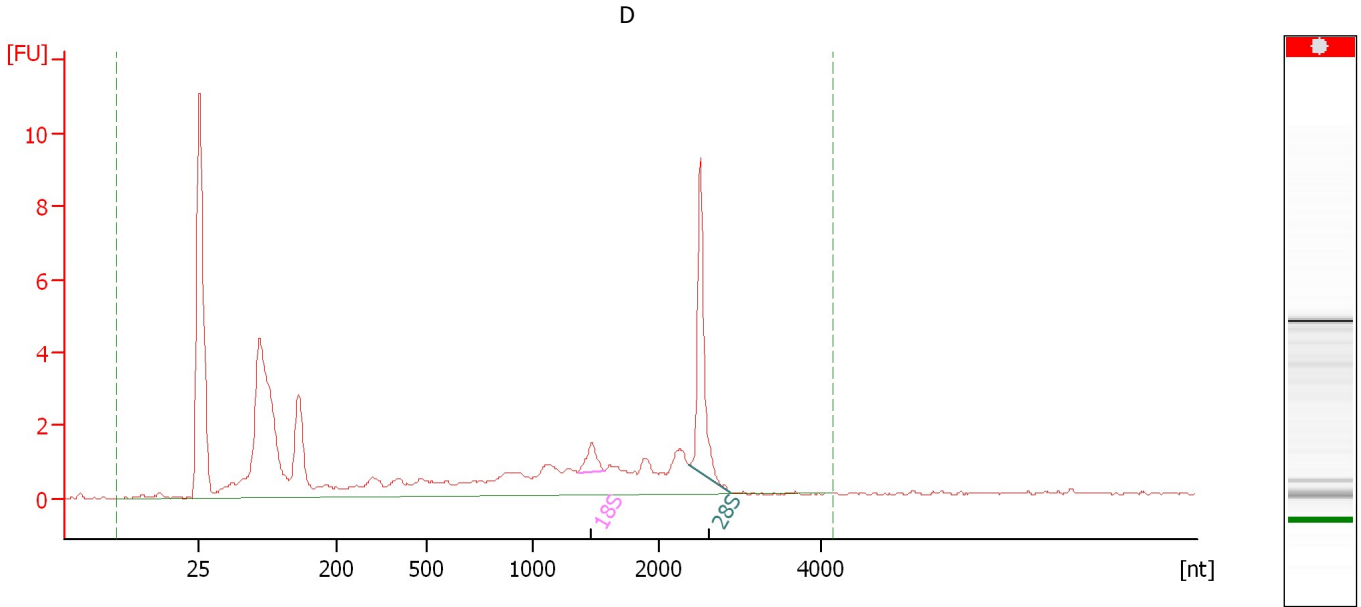
Fragment table for sample 6 : #0

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,435 | 1,614 | 5.7 | 1.0 |
| 28S | 2,558 | 2,846 | 0.9 | 0.1 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
 Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : D

End Analysis Time Range [s] : 53

Overall Results for sample 7 : D

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 57.2 | RNA Integrity Number (RIN): | N/A (B.02.08) |
| RNA Concentration: | 62 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 6.4 | Result Flagging Label: | RIN N/A |

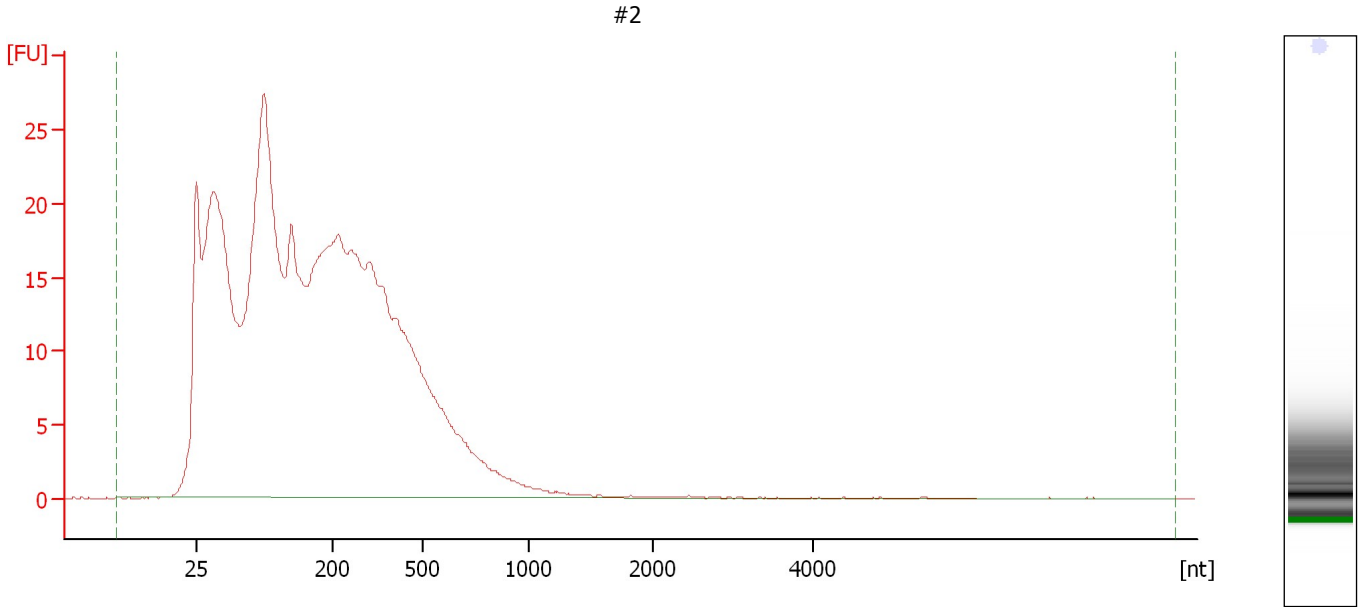
Fragment table for sample 7 : D

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,360 | 1,566 | 1.0 | 1.8 |
| 28S | 2,388 | 2,888 | 6.7 | 11.7 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



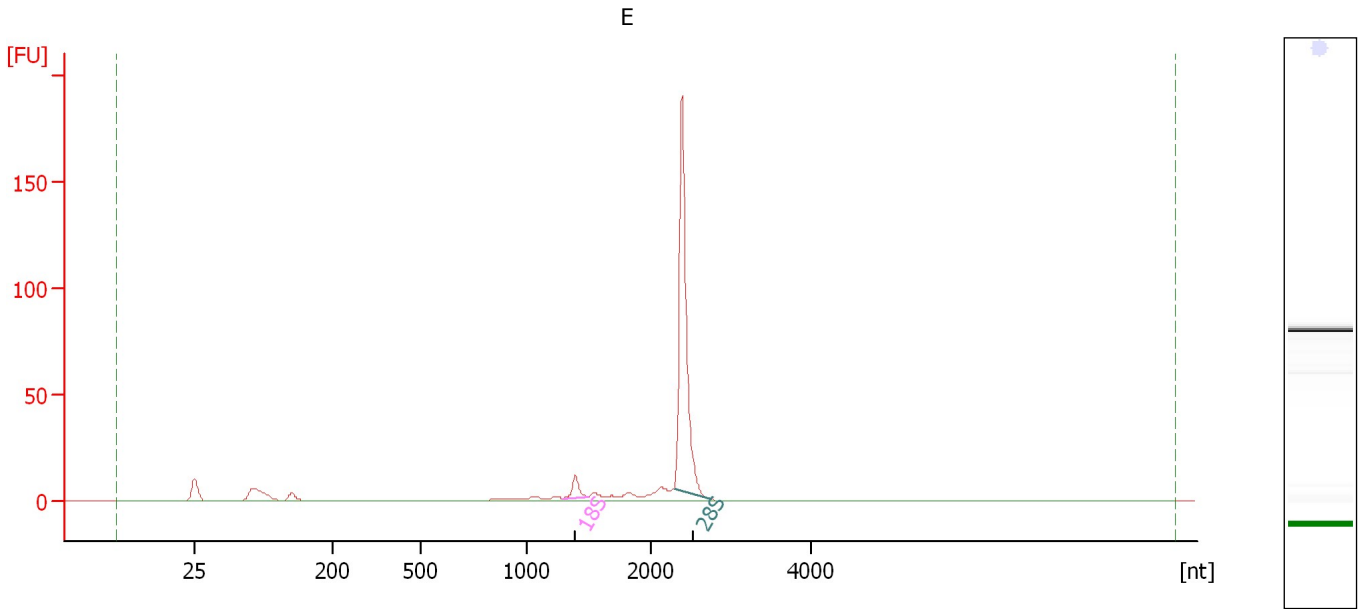
Overall Results for sample 8 : #2

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 635.1 | RNA Integrity Number (RIN): | 2.2 (B.02.08) |
| RNA Concentration: | 684 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 2.20 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : E

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 267.2 | RNA Integrity Number (RIN): | 7.5 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 288 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 17.9 | Result Flagging Label: | RIN: 7.50 |

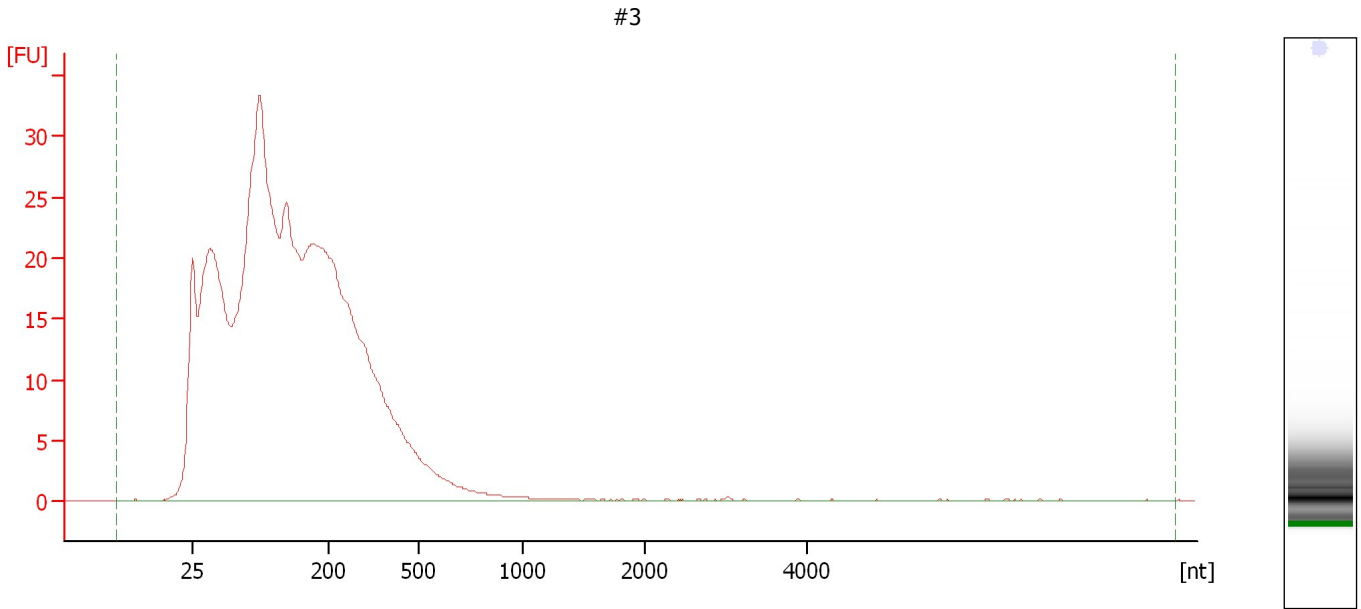
Fragment table for sample 9 : E

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,300 | 1,499 | 8.8 | 3.3 |
| 28S | 2,307 | 2,745 | 158.5 | 59.3 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



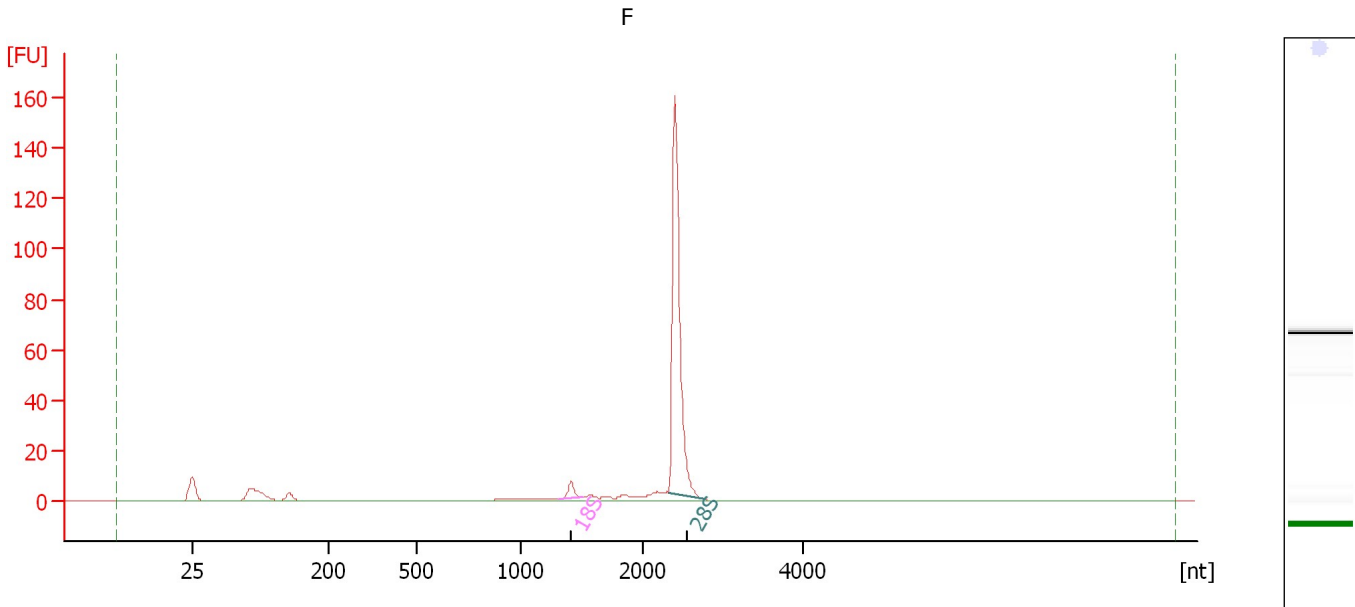
Overall Results for sample 10 : #3

| | | | |
|-------------------------|-----------------|-----------------------------|---|
| RNA Area: | 661.1 | RNA Integrity Number (RIN): | 2.3 (B.02.08) |
| RNA Concentration: | 712 ng/ μ l | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN: 2.30 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
 Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : F

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 200.4 | RNA Integrity Number (RIN): | 7.4 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 216 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 23.2 | Result Flagging Label: | RIN: 7.40 |

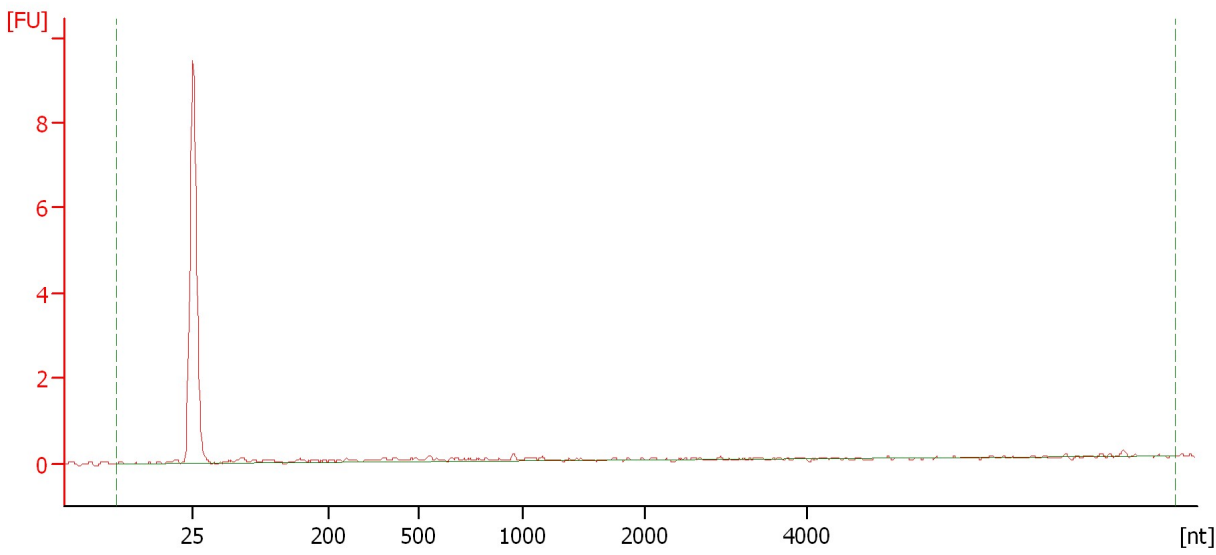
Fragment table for sample 11 : F

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,311 | 1,502 | 5.6 | 2.8 |
| 28S | 2,306 | 2,773 | 130.1 | 64.9 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Electropherogram Summary Continued ...



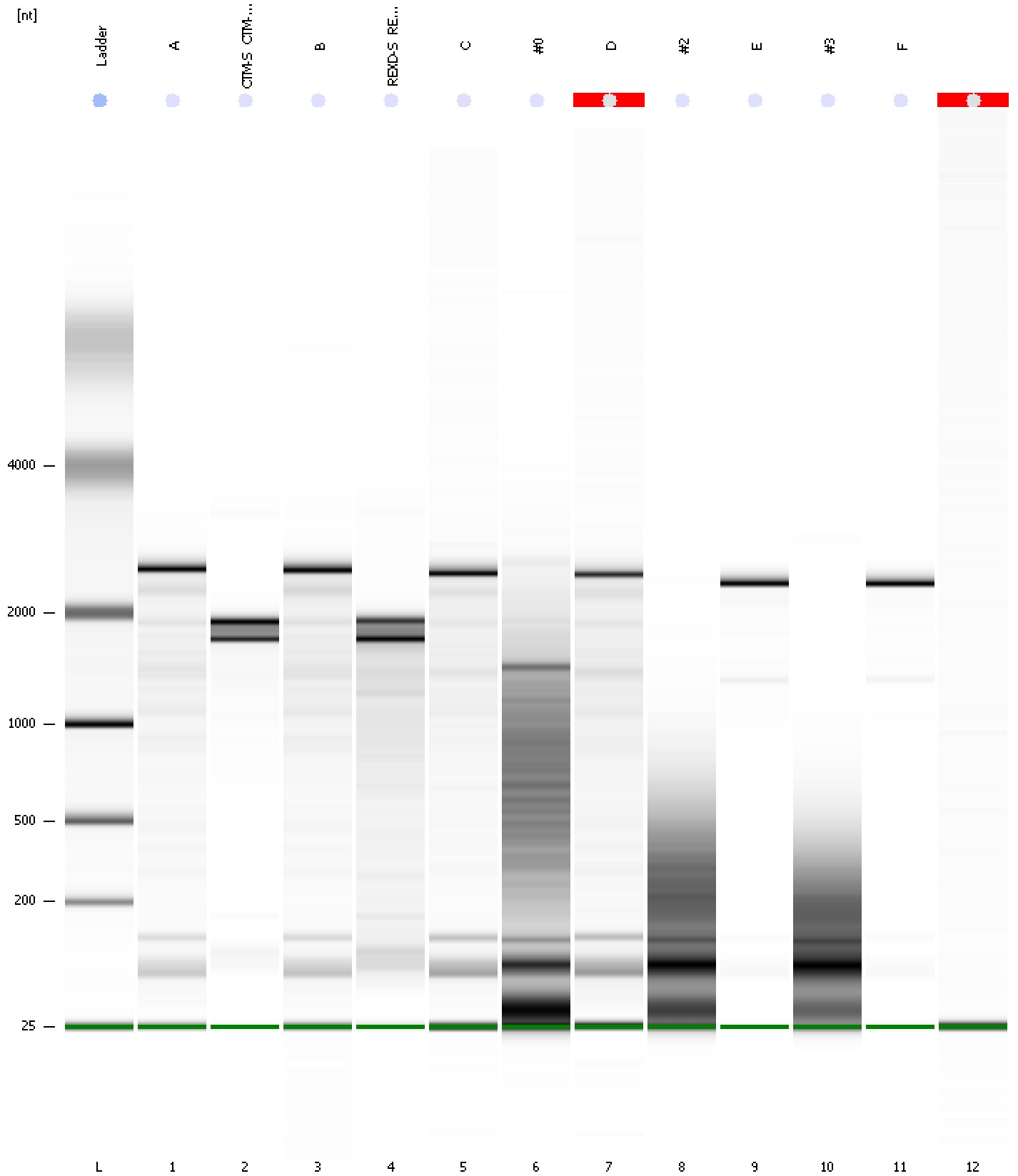
Overall Results for sample 12 :

| | | | |
|-------------------------|---------|-----------------------------|---|
| RNA Area: | 3.0 | RNA Integrity Number (RIN): | N/A (B.02.08) |
| RNA Concentration: | 3 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.0 | Result Flagging Label: | RIN N/A |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
Modified: 4/16/2012 10:26:01 AM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad

Created: 4/12/2012 4:22:31 PM
 Modified: 4/16/2012 10:26:01 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 | | 4/12/2012 4:45:29 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-12\2012-04-12_011.xad) | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 4/12/2012 4:22:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |