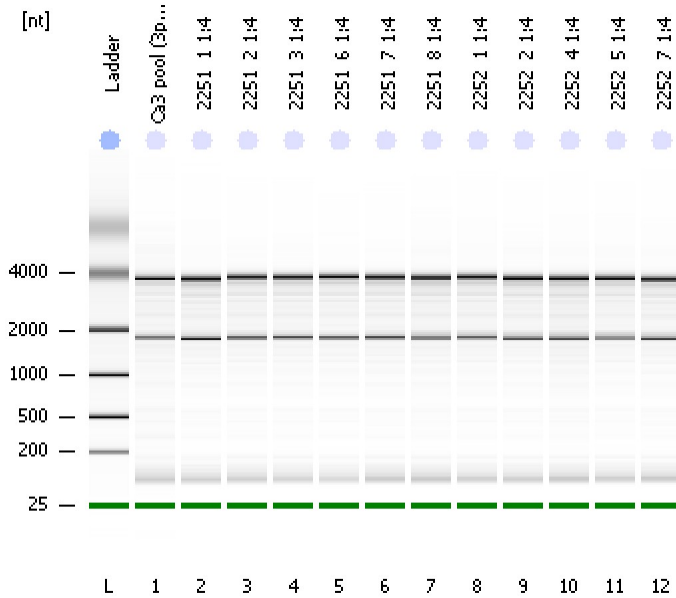


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

Electrophoresis File Run Summary



Instrument Information:

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

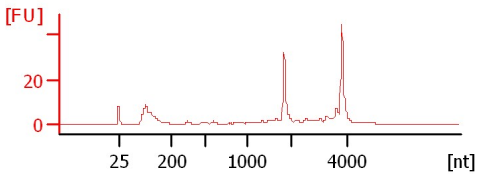
Assay Information:

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.

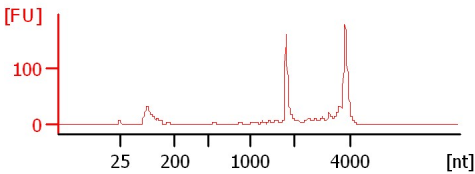
Chip Information:

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

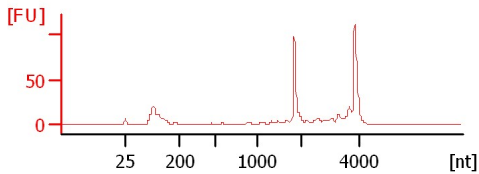
Ca3 pool (3punches)  
RIN: 7.90



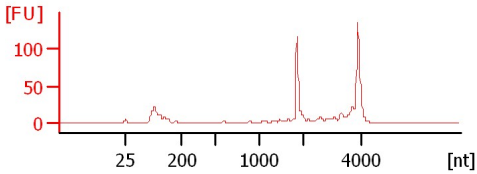
2251\_1 1:4  
RIN: 8.40



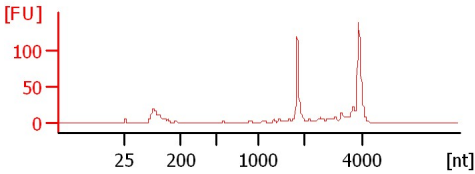
2251\_2 1:4  
RIN: 8.50



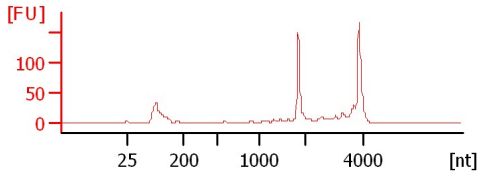
2251\_3 1:4  
RIN: 8.40



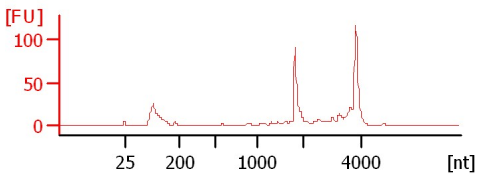
2251\_6 1:4  
RIN: 8.60



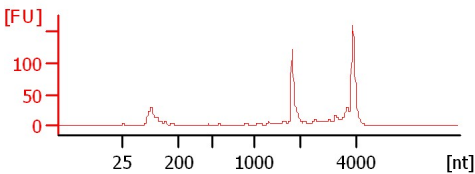
2251\_7 1:4  
RIN: 8.30



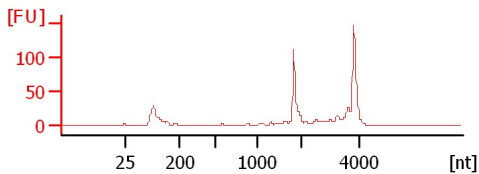
2251\_8 1:4  
RIN: 8.40



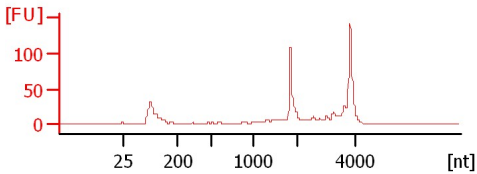
2252\_1 1:4  
RIN: 8.60



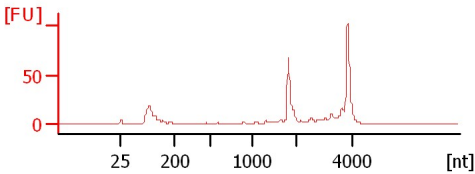
2252\_2 1:4  
RIN: 8.60



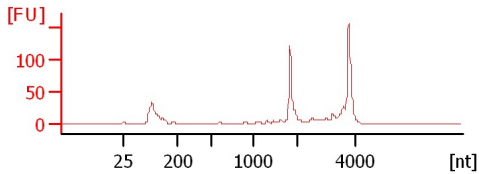
2252\_4 1:4  
RIN: 8.20



2252\_5 1:4  
RIN: 8.60



2252\_7 1:4  
RIN: 8.50



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electrophoresis File Run Summary (Chip Summary)**

| Sample Name         | Sample Comment | Status | Result Label      | Result Color |
|---------------------|----------------|--------|-------------------|--------------|
| Ca3 pool (3punches) |                | ✓      | RIN: 7.90         |              |
| 2251_1 1:4          |                | ✓      | RIN: 8.40         |              |
| 2251_2 1:4          |                | ✓      | RIN: 8.50         |              |
| 2251_3 1:4          |                | ✓      | RIN: 8.40         |              |
| 2251_6 1:4          |                | ✓      | RIN: 8.60         |              |
| 2251_7 1:4          |                | ✓      | RIN: 8.30         |              |
| 2251_8 1:4          |                | ✓      | RIN: 8.40         |              |
| 2252_1 1:4          |                | ✓      | RIN: 8.60         |              |
| 2252_2 1:4          |                | ✓      | RIN: 8.60         |              |
| 2252_4 1:4          |                | ✓      | RIN: 8.20         |              |
| 2252_5 1:4          |                | ✓      | RIN: 8.60         |              |
| 2252_7 1:4          |                | ✓      | RIN: 8.50         |              |
| Ladder              |                | ✓      | All Other Samples |              |

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 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/ $\mu$ l] : 150  
Lower Marker Concentration [ng/ $\mu$ l] : 0  
Upper Marker Concentration [ng/ $\mu$ 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

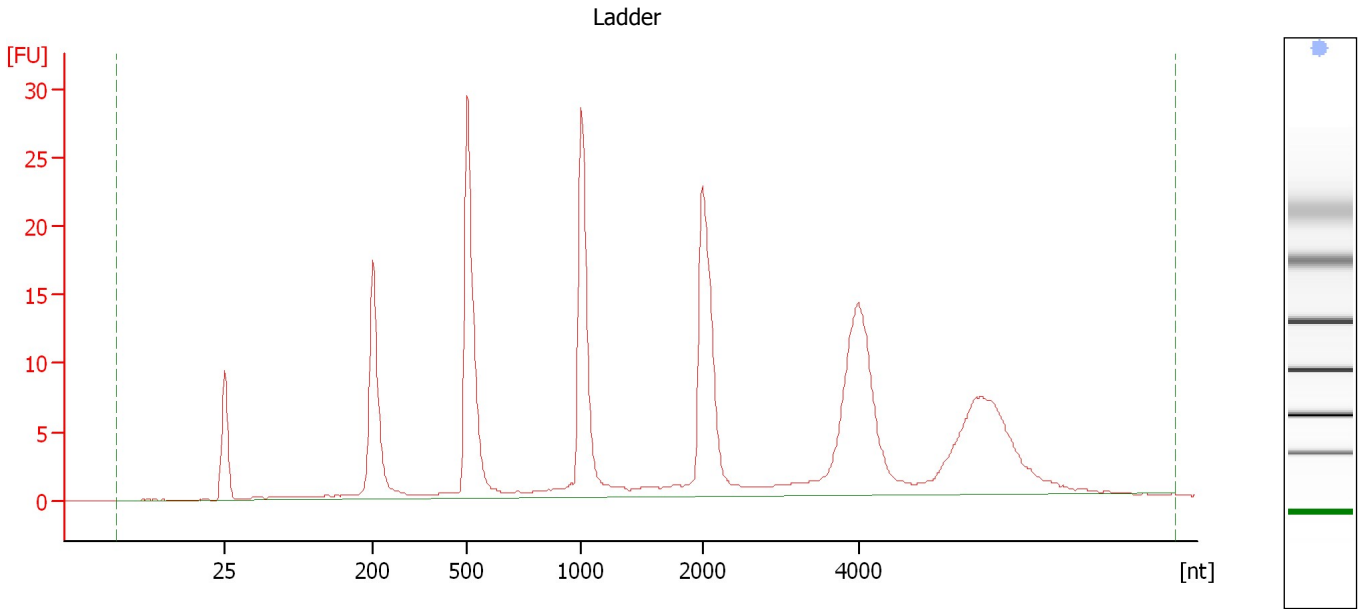
### Ladder

| 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\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary**



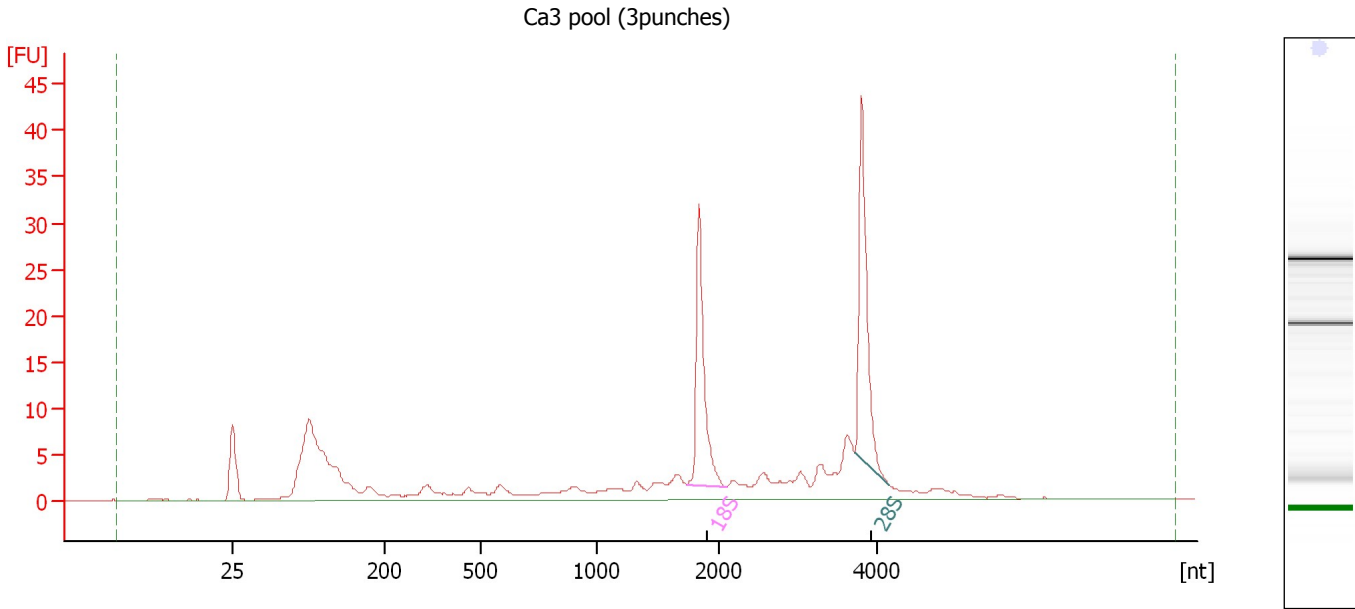
**Overall Results for Ladder**

|                    |           |                        |   |
|--------------------|-----------|------------------------|---|
| RNA Area:          | 237.5     | Result Flagging Color: | <span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| RNA Concentration: | 150 ng/μl | Result Flagging Label: | All Other Samples   |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
 Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Ca3 pool (3punches)**

|                         |           |                             |   |
|-------------------------|-----------|-----------------------------|---|
| RNA Area:               | 197.9     | RNA Integrity Number (RIN): | 7.9 (B.02.08)   |
| RNA Concentration:      | 125 ng/μl | Result Flagging Color:      | <span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 1.1       | Result Flagging Label:      | RIN: 7.90   |

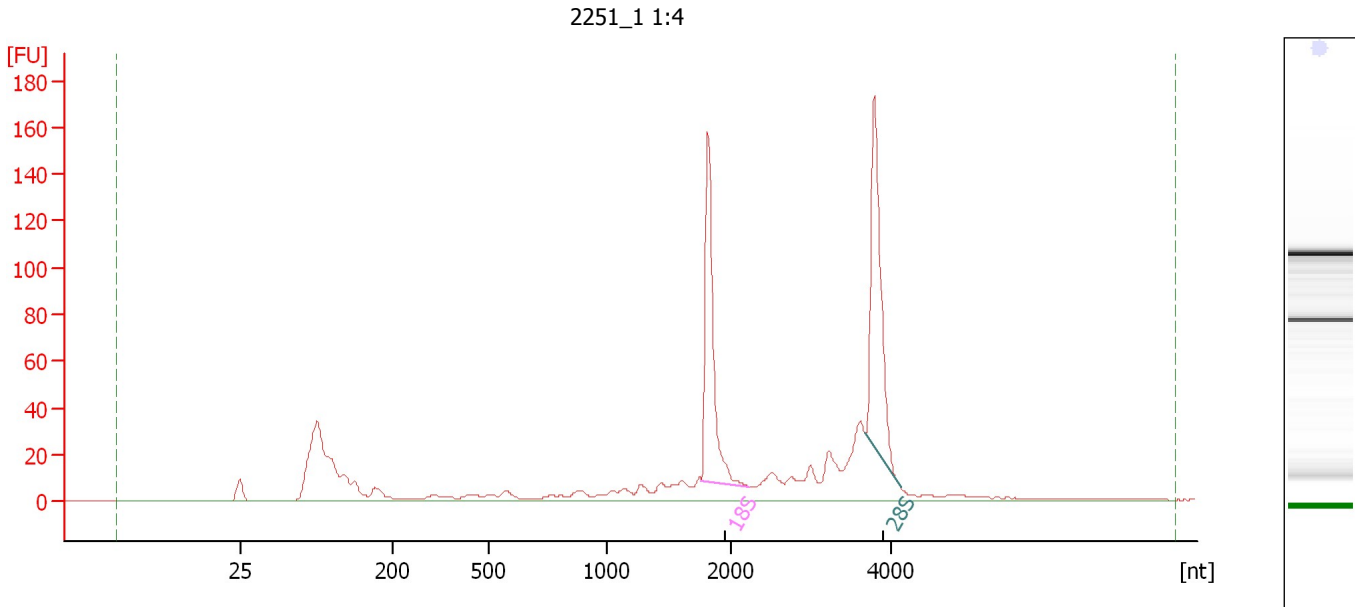
**Fragment table for sample 1 : Ca3 pool (3punches)**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,736           | 2,090         | 27.9 | 14.1            |
| 28S  | 3,708           | 4,152         | 29.4 | 14.9            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 2251\_1\_1:4**

RNA Area: 787.3      RNA Integrity Number (RIN): 8.4 (B.02.08)  
RNA Concentration: 497 ng/μl      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.1      Result Flagging Label: RIN: 8.40

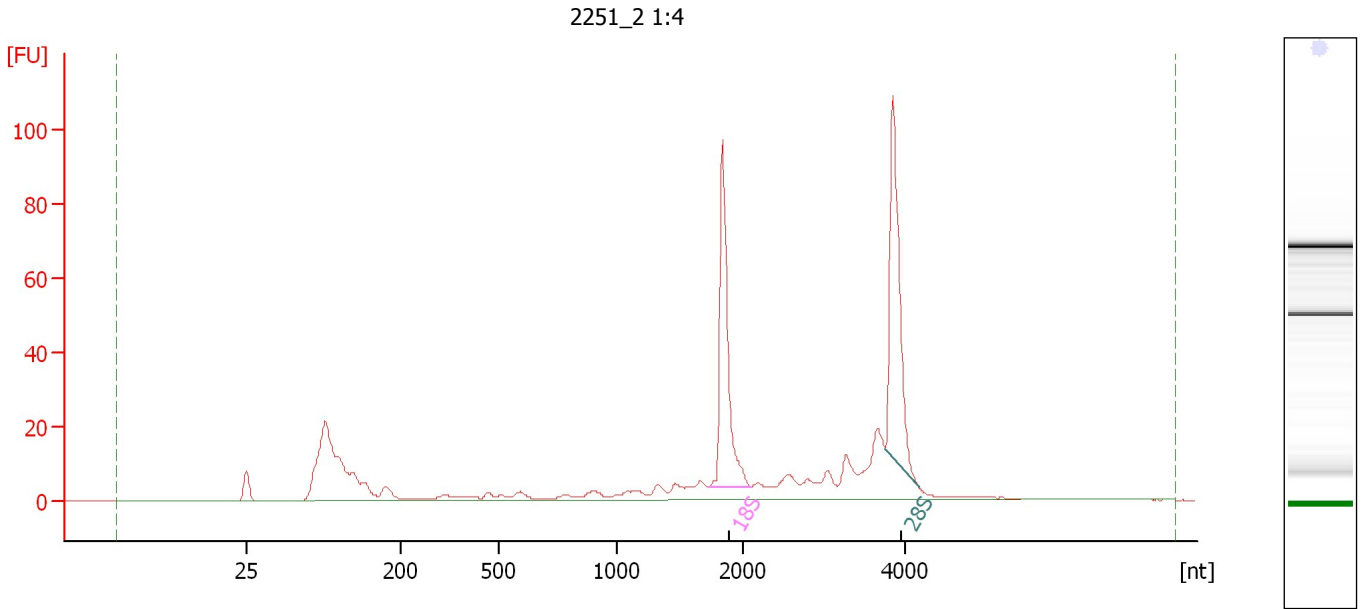
**Fragment table for sample 2 : 2251\_1\_1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,761           | 2,229         | 129.3 | 16.4            |
| 28S  | 3,668           | 4,107         | 146.1 | 18.6            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 2251\_2 1:4**

RNA Area: 461.4                      RNA Integrity Number (RIN): 8.5 (B.02.08)  
RNA Concentration: 291 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.1              Result Flagging Label: RIN: 8.50

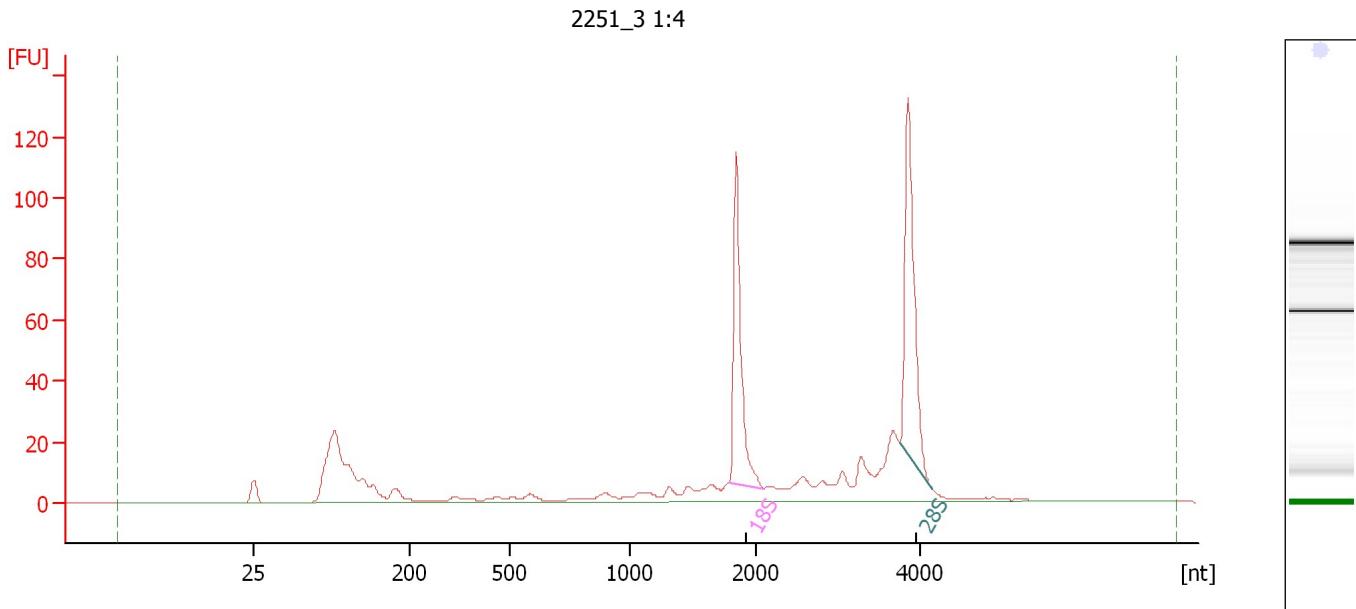
**Fragment table for sample 3 : 2251\_2 1:4**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,726           | 2,089         | 80.3 | 17.4            |
| 28S  | 3,747           | 4,155         | 87.6 | 19.0            |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
 Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 2251 3 1:4**

|                         |           |                             |   |
|-------------------------|-----------|-----------------------------|---|
| RNA Area:               | 533.4     | RNA Integrity Number (RIN): | 8.4 (B.02.08)   |
| RNA Concentration:      | 337 ng/μl | Result Flagging Color:      | <span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 1.2       | Result Flagging Label:      | RIN: 8.40   |

**Fragment table for sample 4 : 2251 3 1:4**

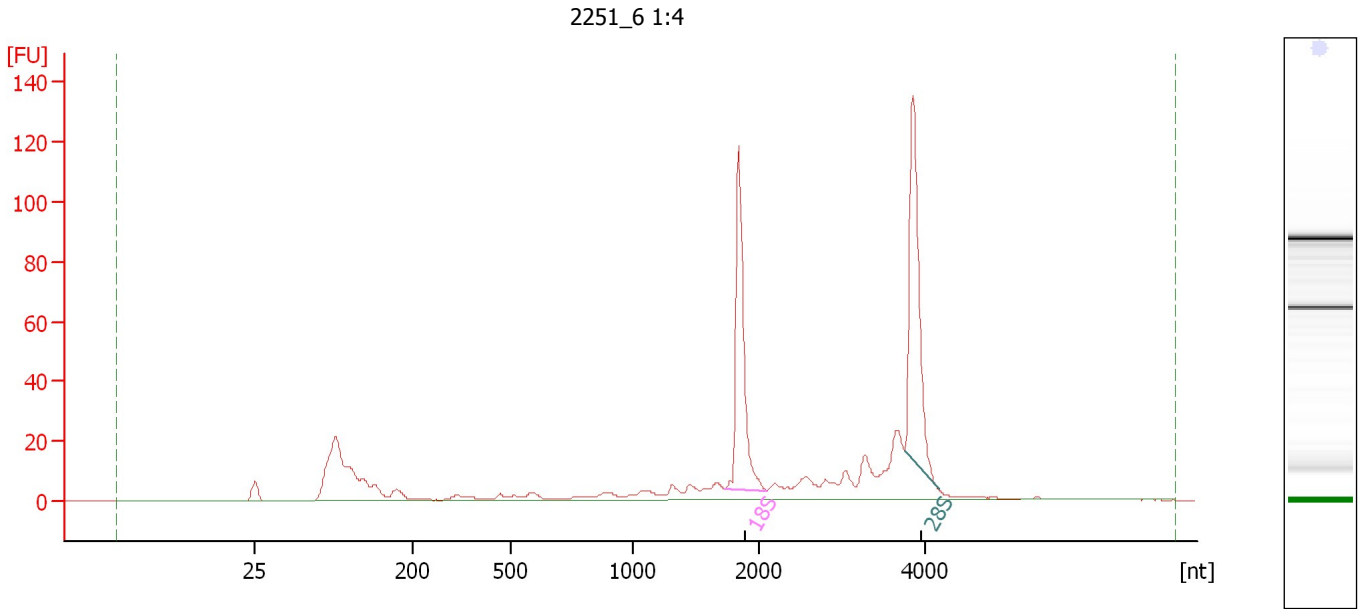
| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,784           | 2,082         | 88.8  | 16.7            |
| 28S  | 3,747           | 4,137         | 103.3 | 19.4            |



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 2251\_6 1:4**

RNA Area: 517.2 RNA Integrity Number (RIN): 8.6 (B.02.08)  
RNA Concentration: 327 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.1 Result Flagging Label: RIN: 8.60

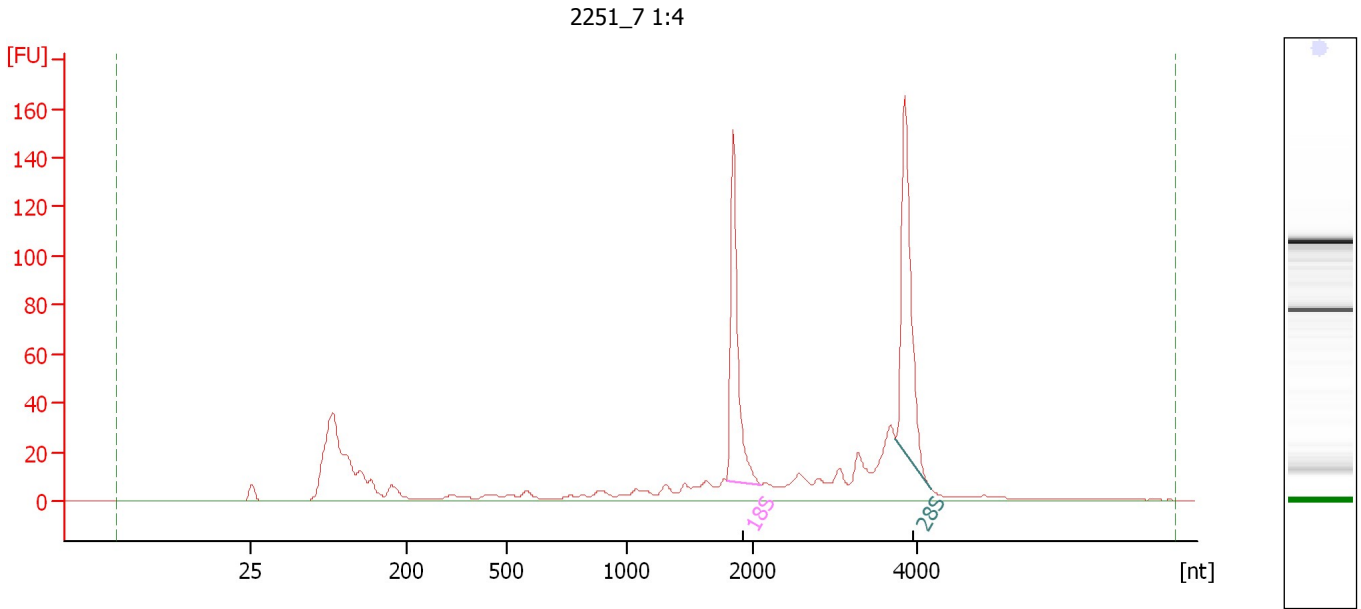
**Fragment table for sample 5 : 2251\_6 1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,727           | 2,084         | 94.3  | 18.2            |
| 28S  | 3,756           | 4,170         | 105.7 | 20.4            |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
 Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 2251\_7 1:4**

|                         |           |                             |   |
|-------------------------|-----------|-----------------------------|---|
| RNA Area:               | 732.1     | RNA Integrity Number (RIN): | 8.3 (B.02.08)   |
| RNA Concentration:      | 462 ng/μl | Result Flagging Color:      | <span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 1.1       | Result Flagging Label:      | RIN: 8.30   |

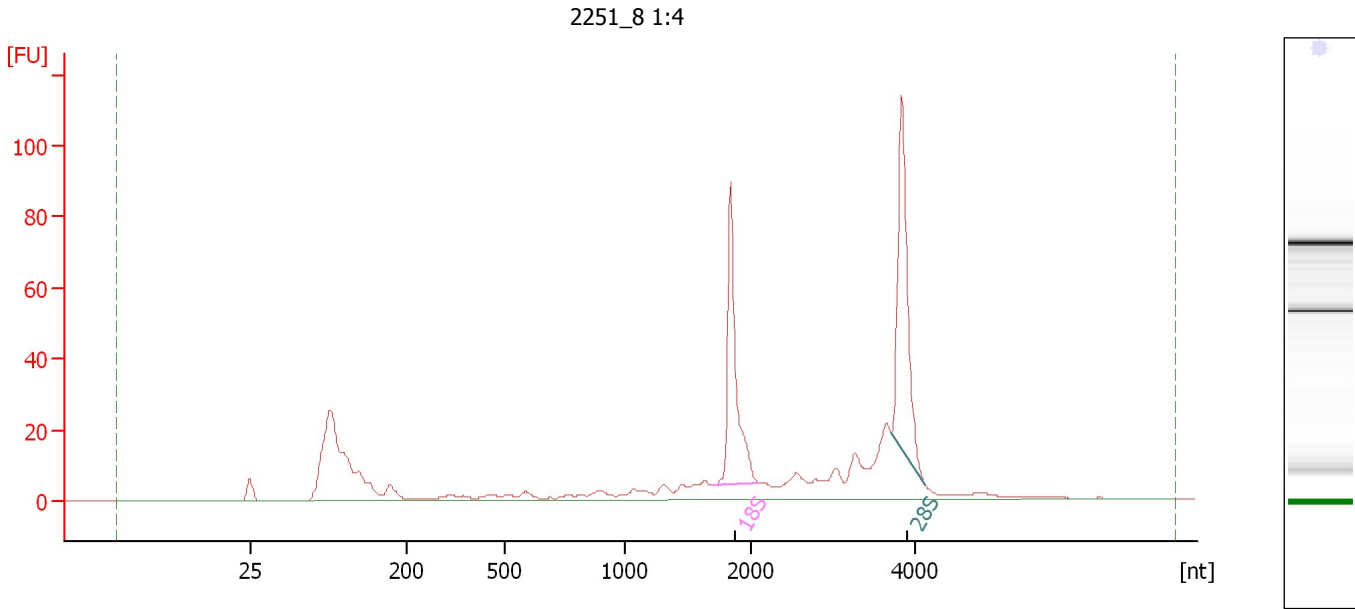
**Fragment table for sample 6 : 2251\_7 1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,783           | 2,081         | 116.8 | 16.0            |
| 28S  | 3,736           | 4,153         | 133.4 | 18.2            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 2251 8 1:4**

RNA Area: 506.5      RNA Integrity Number (RIN): 8.4 (B.02.08)  
RNA Concentration: 320 ng/μl      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.1      Result Flagging Label: RIN: 8.40

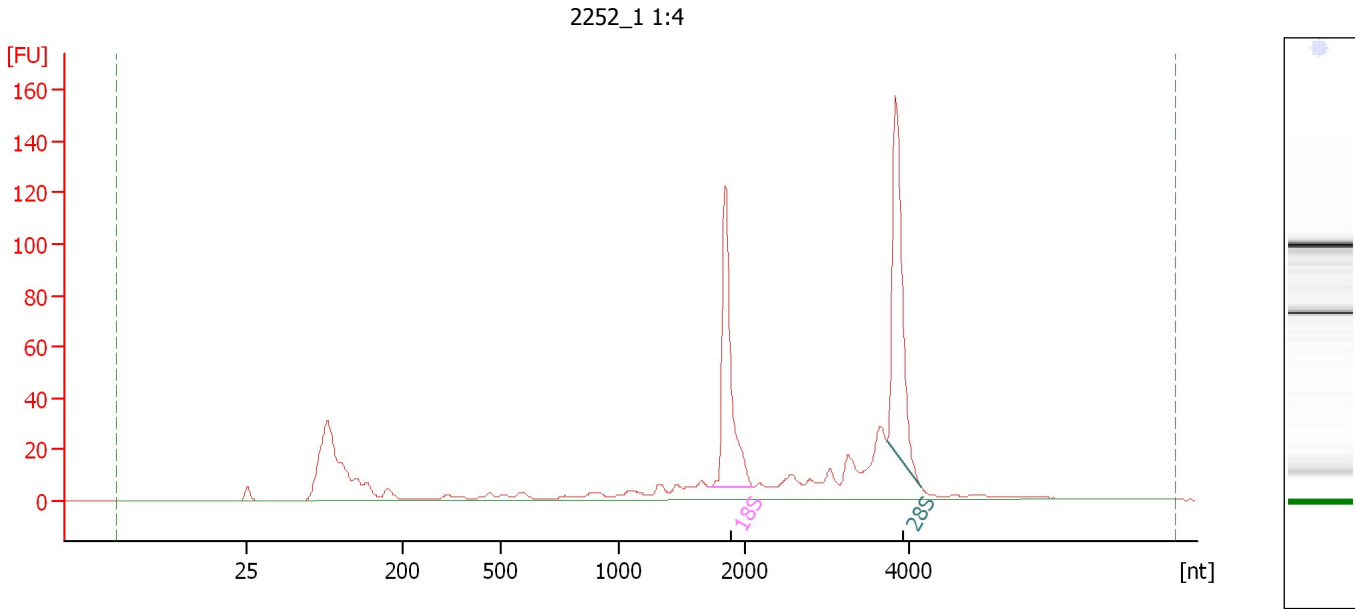
**Fragment table for sample 7 : 2251 8 1:4**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,697           | 2,093         | 80.8 | 16.0            |
| 28S  | 3,712           | 4,130         | 91.0 | 18.0            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 2252\_1\_1:4**

|                         |           |                             |   |
|-------------------------|-----------|-----------------------------|---|
| RNA Area:               | 661.9     | RNA Integrity Number (RIN): | 8.6 (B.02.08)   |
| RNA Concentration:      | 418 ng/μl | Result Flagging Color:      | <span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 1.1       | Result Flagging Label:      | RIN: 8.60   |

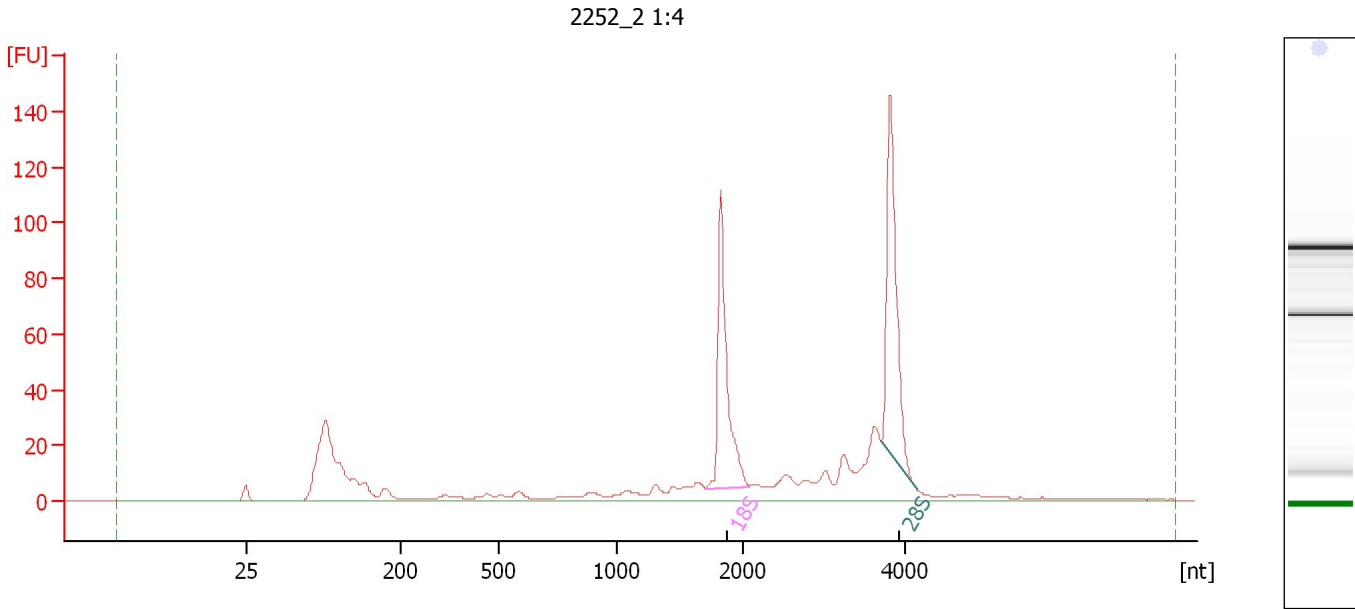
**Fragment table for sample 8 : 2252\_1\_1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,718           | 2,103         | 111.5 | 16.8            |
| 28S  | 3,745           | 4,166         | 126.1 | 19.1            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 2252\_2\_1:4**

|                         |           |                             |   |
|-------------------------|-----------|-----------------------------|---|
| RNA Area:               | 619.9     | RNA Integrity Number (RIN): | 8.6 (B.02.08)   |
| RNA Concentration:      | 391 ng/μl | Result Flagging Color:      | <span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 1.1       | Result Flagging Label:      | RIN: 8.60   |

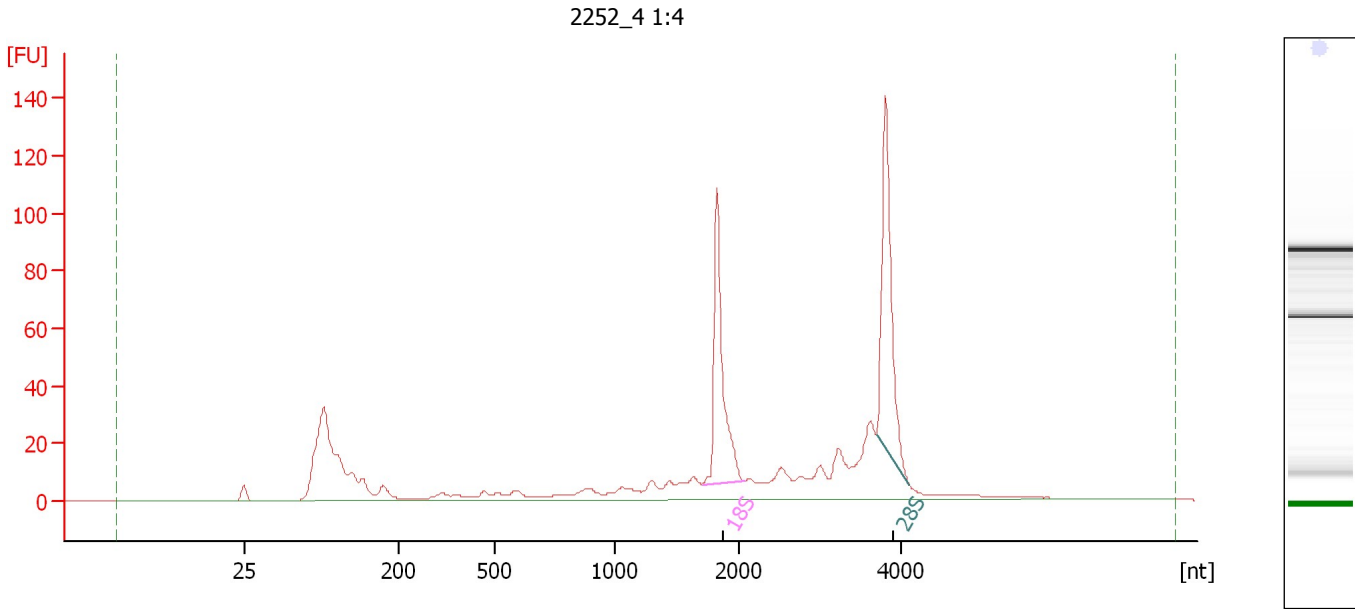
**Fragment table for sample 9 : 2252\_2\_1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,709           | 2,076         | 104.3 | 16.8            |
| 28S  | 3,695           | 4,129         | 119.9 | 19.3            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 2252 4 1:4**

RNA Area: 678.7                      RNA Integrity Number (RIN): 8.2 (B.02.08)  
RNA Concentration: 429 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.1              Result Flagging Label: RIN: 8.20

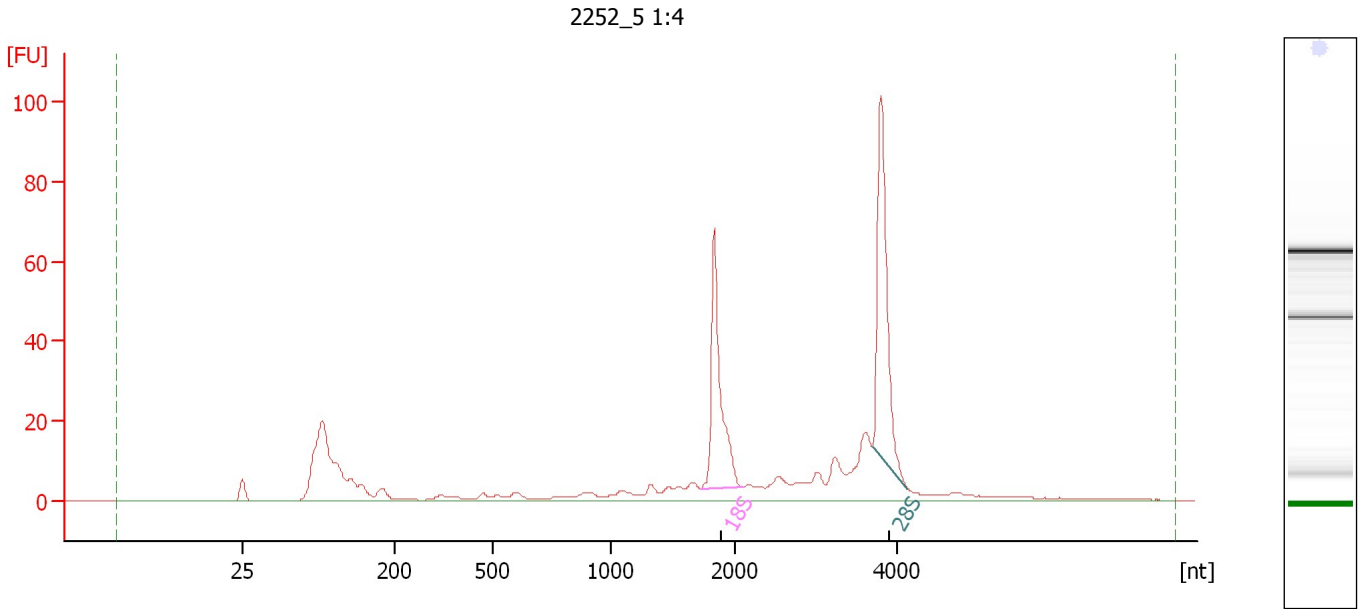
**Fragment table for sample 10 : 2252 4 1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,706           | 2,060         | 101.7 | 15.0            |
| 28S  | 3,699           | 4,109         | 110.5 | 16.3            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 2252 5 1:4**

RNA Area: 414.0                      RNA Integrity Number (RIN): 8.6 (B.02.08)  
RNA Concentration: 261 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.2                      Result Flagging Label: RIN: 8.60

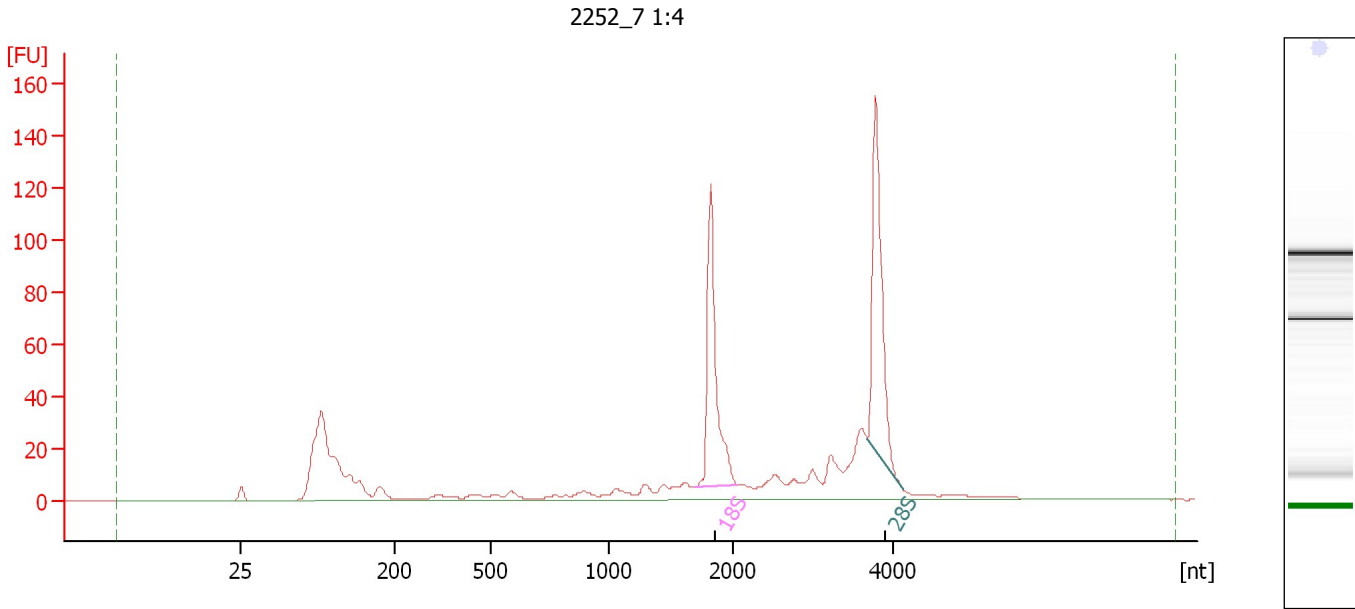
**Fragment table for sample 11 : 2252 5 1:4**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,720           | 2,085         | 67.2 | 16.2            |
| 28S  | 3,703           | 4,141         | 80.1 | 19.4            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 2252 7 1:4**

RNA Area: 672.5 RNA Integrity Number (RIN): 8.5 (B.02.08)  
RNA Concentration: 425 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.1 Result Flagging Label: RIN: 8.50

**Fragment table for sample 12 : 2252 7 1:4**

| Name | Start Size [nt] | End Size [nt] | Area  | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S  | 1,693           | 2,057         | 109.4 | 16.3            |
| 28S  | 3,666           | 4,104         | 122.2 | 18.2            |



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-22\2013-11-22\_004.xad

Created: 11/22/2013 4:05:17 PM  
Modified: 11/22/2013 4:29:13 PM

**Gel Image**

