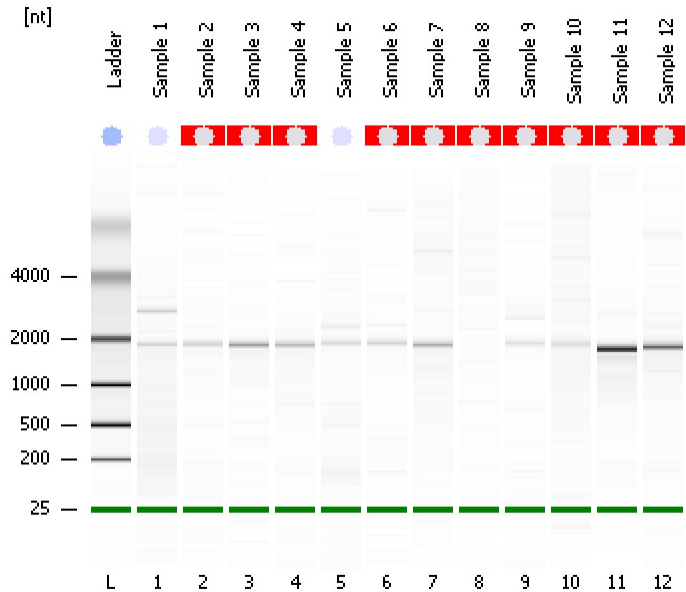


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electrophoresis File Run Summary**



Instrument Information:

Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

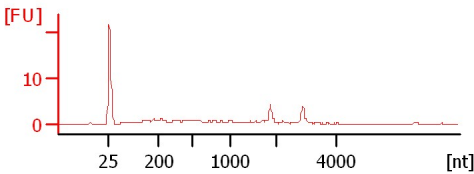
Assay Information:

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.

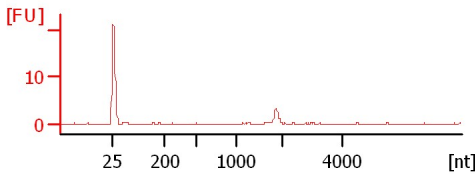
Chip Information:

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

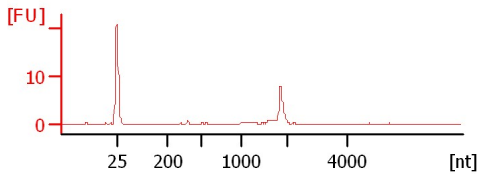
**Sample 1**  
row 3  
RIN: 6.30



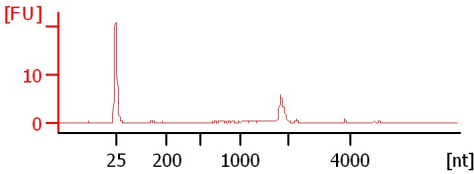
**Sample 2**  
row 3  
RIN N/A



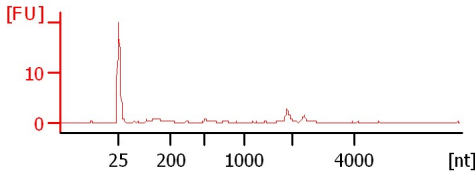
**Sample 3**  
RIN N/A



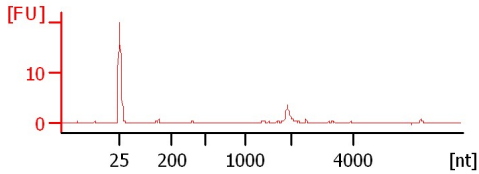
**Sample 4**  
RIN N/A



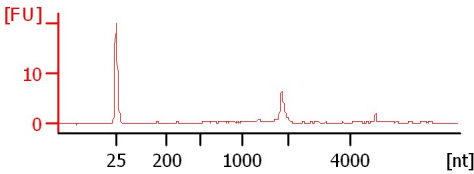
**Sample 5**  
RIN: 7.30



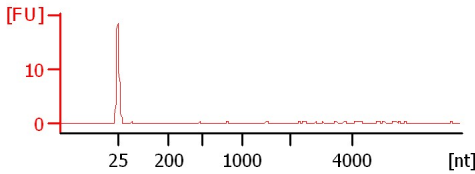
**Sample 6**  
RIN N/A



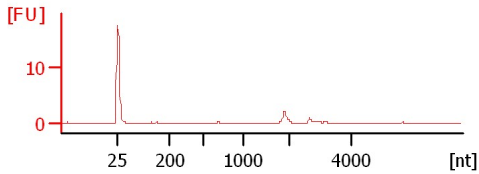
**Sample 7**  
RIN N/A



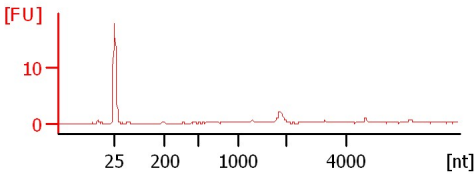
**Sample 8**  
RIN N/A



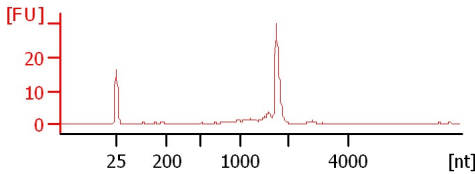
**Sample 9**  
RIN N/A



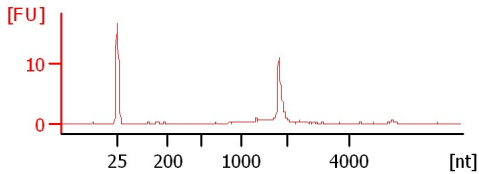
**Sample 10**  
RIN N/A



**Sample 11**  
RIN N/A



**Sample 12**  
RIN N/A



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

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

| Sample Name | Sample Comment | Status | Result Label      | Result Color |
|-------------|----------------|--------|-------------------|--------------|
| Sample 1    | row 3          | ✓      | RIN: 6.30         |              |
| Sample 2    | row 3          | ✓      | RIN N/A           |              |
| Sample 3    |                | ✓      | RIN N/A           |              |
| Sample 4    |                | ✓      | RIN N/A           |              |
| Sample 5    |                | ✓      | RIN: 7.30         |              |
| Sample 6    |                | ✓      | RIN N/A           |              |
| Sample 7    |                | ✓      | RIN N/A           |              |
| Sample 8    |                | ✓      | RIN N/A           |              |
| Sample 9    |                | ✓      | RIN N/A           |              |
| Sample 10   |                | ✓      | RIN N/A           |              |
| Sample 11   |                | ✓      | RIN N/A           |              |
| Sample 12   |                | ✓      | RIN N/A           |              |
| Ladder      |                | ✓      | All Other Samples |              |

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 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/μl] : 150  
Lower Marker Concentration [ng/μl] : 0  
Upper Marker Concentration [ng/μl] : 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

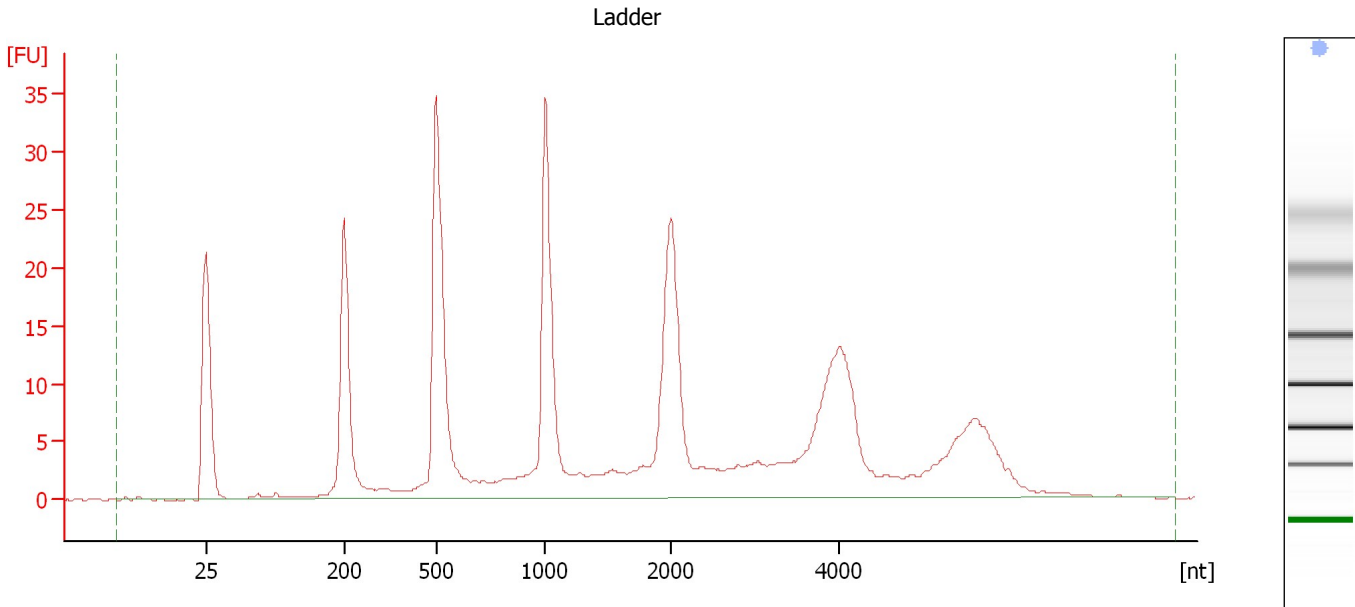
**Ladder**

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary**



**Overall Results for Ladder**

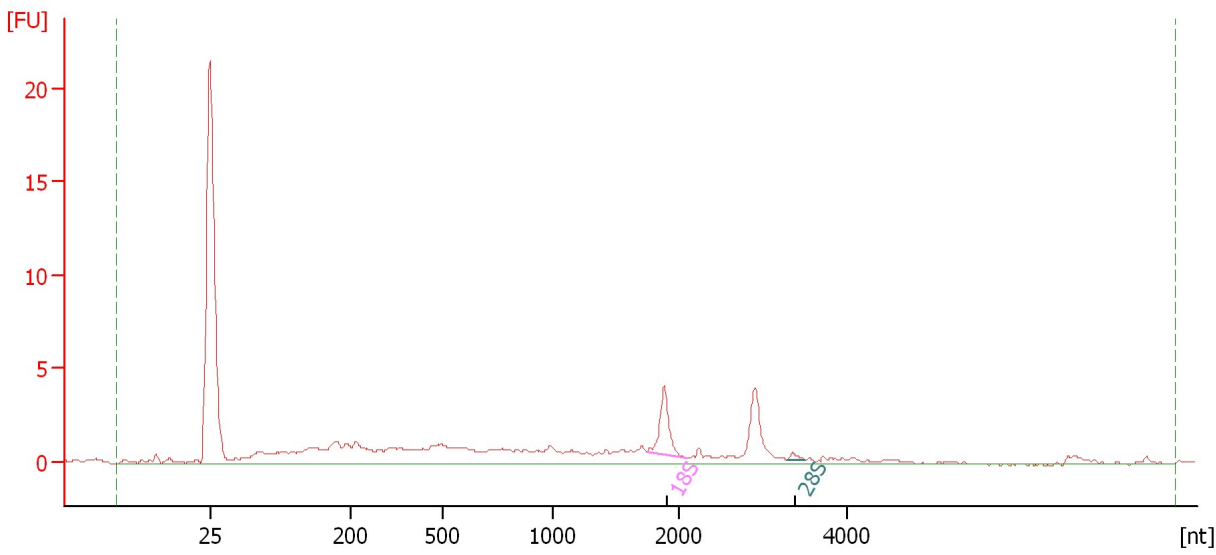
|                    |           |                        |   |
|--------------------|-----------|------------------------|---|
| RNA Area:          | 358.6     | Result Flagging Color: | <span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| RNA Concentration: | 150 ng/μl | Result Flagging Label: | All Other Samples   |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 1 [ row 3 ]



**Overall Results for sample 1 : Sample 1**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 61.7     | RNA Integrity Number (RIN): | 6.3 (B.02.08)   |
| RNA Concentration:      | 26 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]: | 0.1      | Result Flagging Label:      | RIN: 6.30   |

**Fragment table for sample 1 : Sample 1**

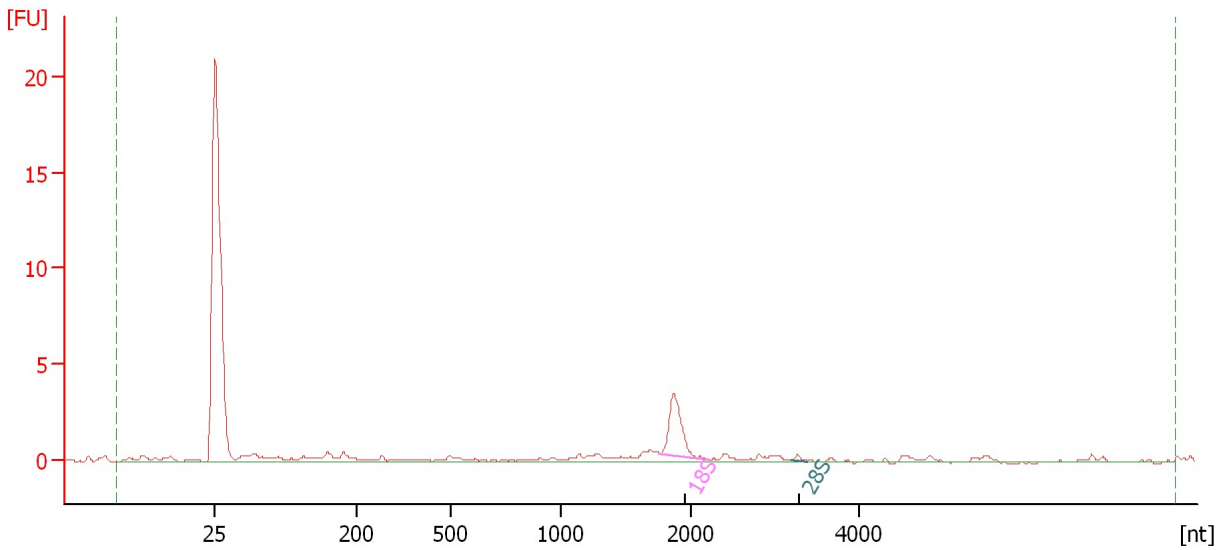
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,742           | 2,092         | 3.9  | 6.3             |
| 28S  | 3,275           | 3,491         | 0.2  | 0.4             |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 2 [ row 3 ]



**Overall Results for sample 2 : Sample 2**

|                         |         |                             |   |
|-------------------------|---------|-----------------------------|---|
| RNA Area:               | 21.2    | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 9 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0     | Result Flagging Label:      | RIN N/A   |

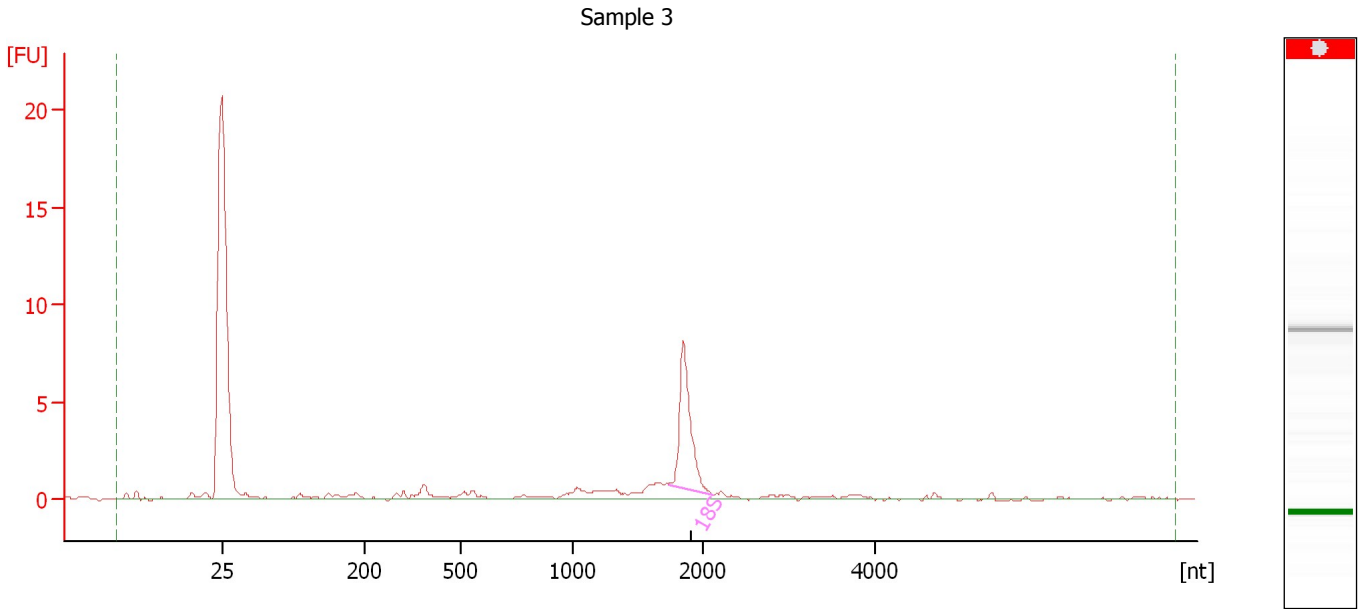
**Fragment table for sample 2 : Sample 2**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,764           | 2,235         | 4.6  | 21.7            |
| 28S  | 3,191           | 3,380         | 0.2  | 0.8             |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Sample 3**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 29.0     | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 12 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0      | Result Flagging Label:      | RIN N/A   |

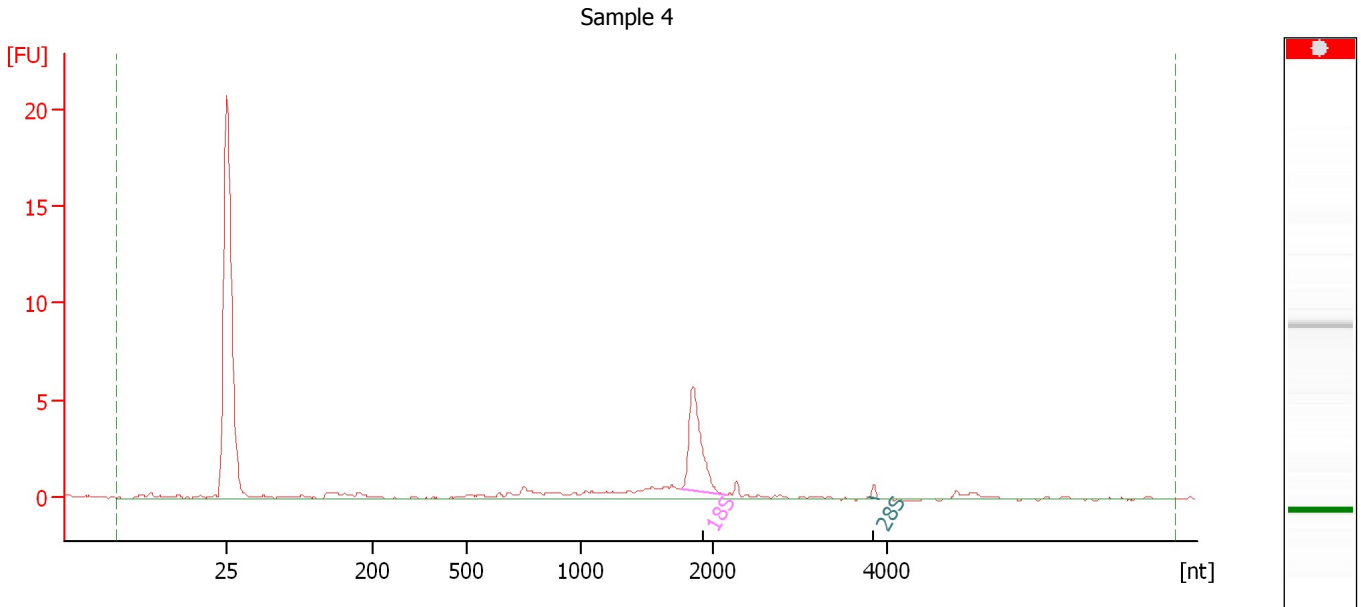
**Fragment table for sample 3 : Sample 3**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,738           | 2,126         | 9.6  | 33.0            |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
 Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Sample 4**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 24.4     | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 10 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0      | Result Flagging Label:      | RIN N/A   |

**Fragment table for sample 4 : Sample 4**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,752           | 2,154         | 7.5  | 30.6            |
| 28S  | 3,802           | 3,913         | 0.3  | 1.2             |

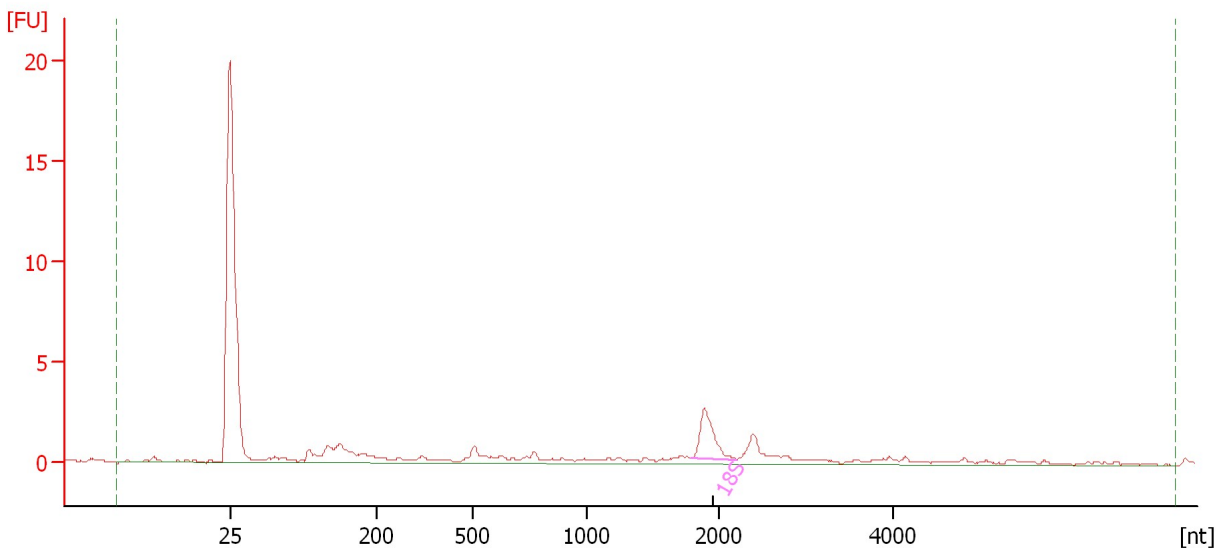


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 5



**Overall Results for sample 5 : Sample 5**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 33.4     | RNA Integrity Number (RIN): | 7.3 (B.02.08)   |
| RNA Concentration:      | 14 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]: | 0.0      | Result Flagging Label:      | RIN: 7.30   |

**Fragment table for sample 5 : Sample 5**

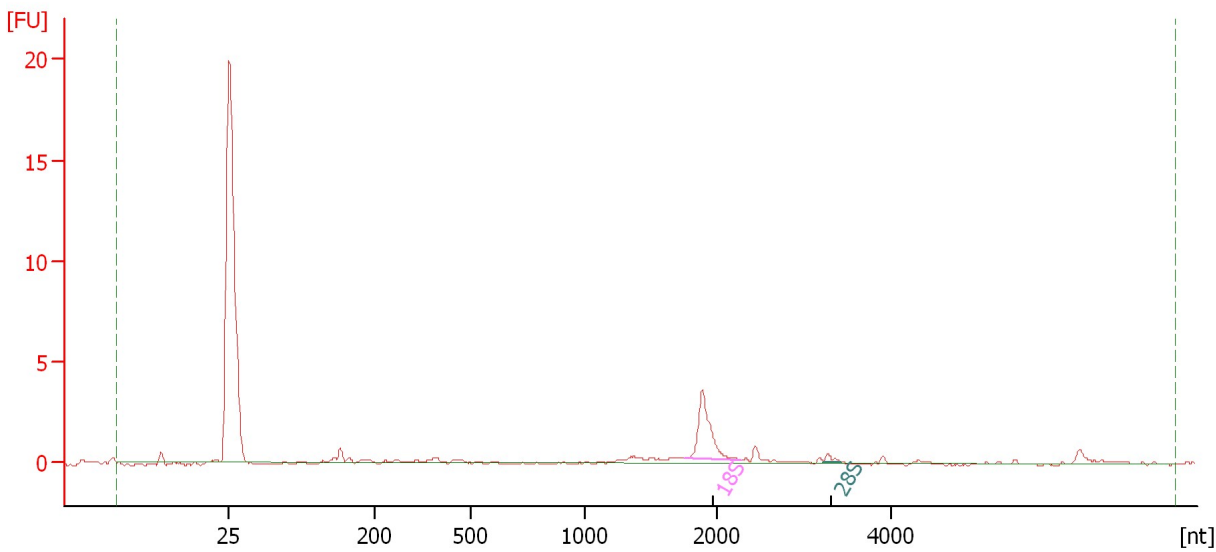
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,796           | 2,205         | 3.8  | 11.3            |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
 Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 6



**Overall Results for sample 6 : Sample 6**

|                         |         |                             |   |
|-------------------------|---------|-----------------------------|---|
| RNA Area:               | 14.3    | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 6 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.1     | Result Flagging Label:      | RIN N/A   |

**Fragment table for sample 6 : Sample 6**

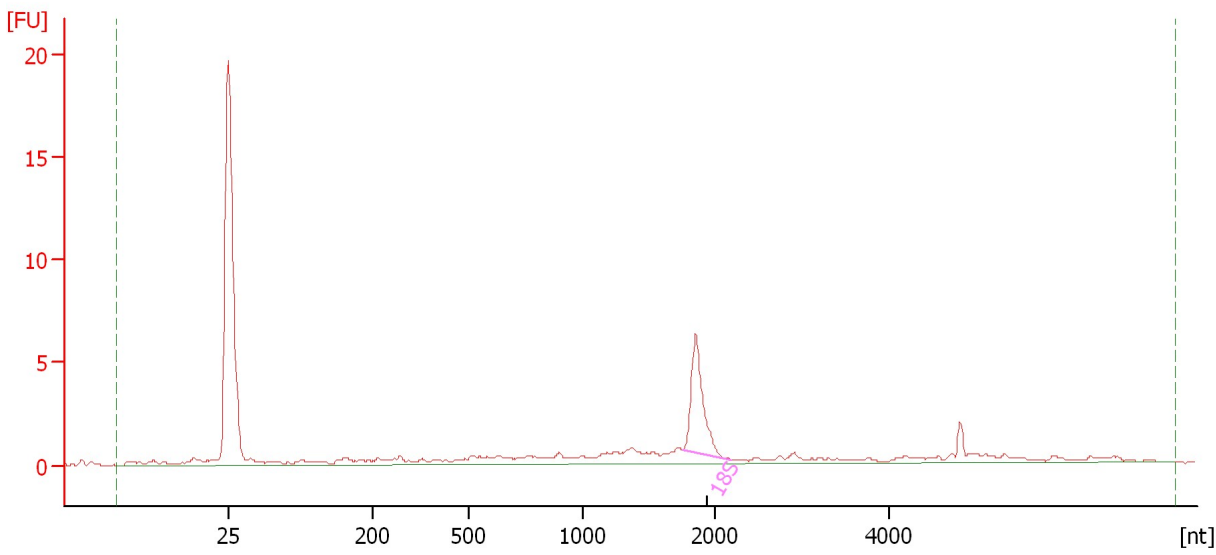
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,754           | 2,278         | 4.8  | 33.5            |
| 28S  | 3,221           | 3,417         | 0.2  | 1.7             |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 7



**Overall Results for sample 7 : Sample 7**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 37.0     | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 15 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0      | Result Flagging Label:      | RIN N/A   |

**Fragment table for sample 7 : Sample 7**

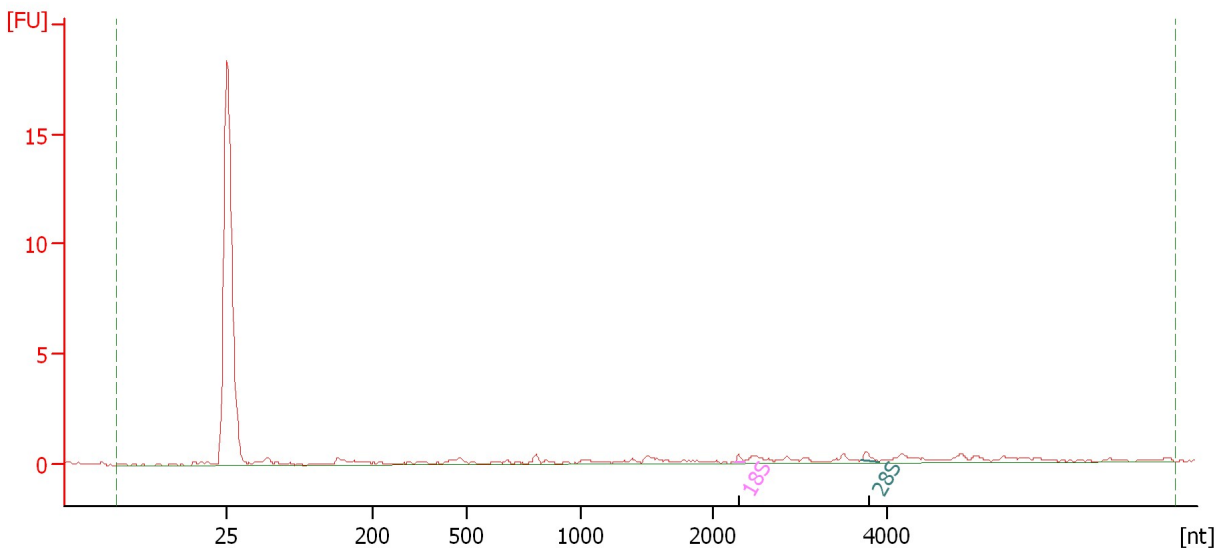
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,753           | 2,192         | 7.7  | 20.8            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 8



**Overall Results for sample 8 : Sample 8**

|                         |         |                             |   |
|-------------------------|---------|-----------------------------|---|
| RNA Area:               | 11.1    | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 5 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 1.7     | Result Flagging Label:      | RIN N/A   |

**Fragment table for sample 8 : Sample 8**

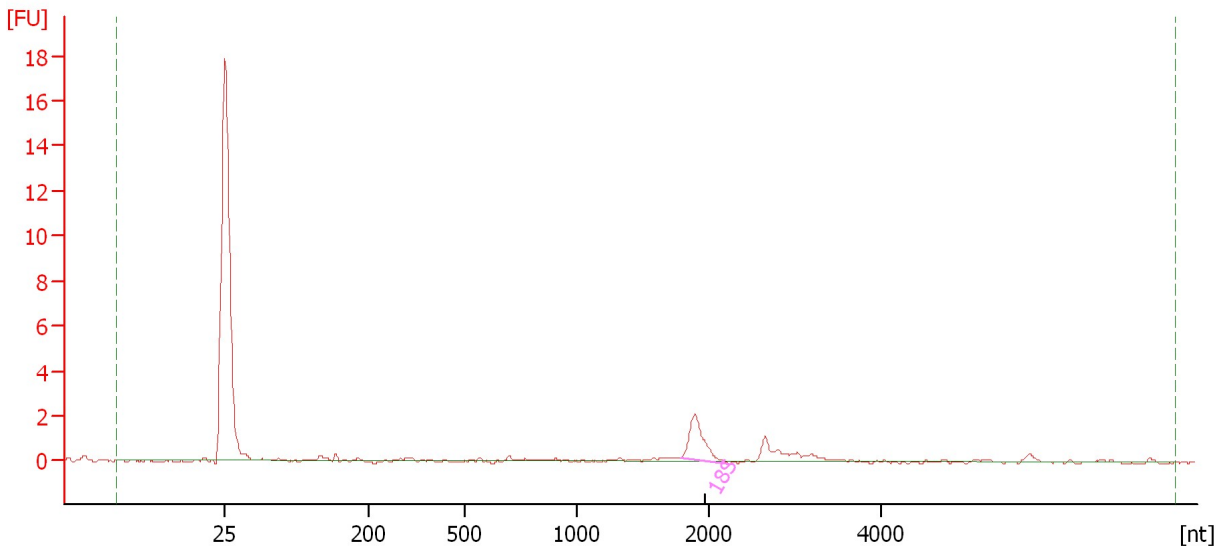
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 2,265           | 2,363         | 0.2  | 1.4             |
| 28S  | 3,704           | 3,925         | 0.3  | 2.3             |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 9



**Overall Results for sample 9 : Sample 9**

|                         |         |                             |   |
|-------------------------|---------|-----------------------------|---|
| RNA Area:               | 11.6    | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 5 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0     | Result Flagging Label:      | RIN N/A   |

**Fragment table for sample 9 : Sample 9**

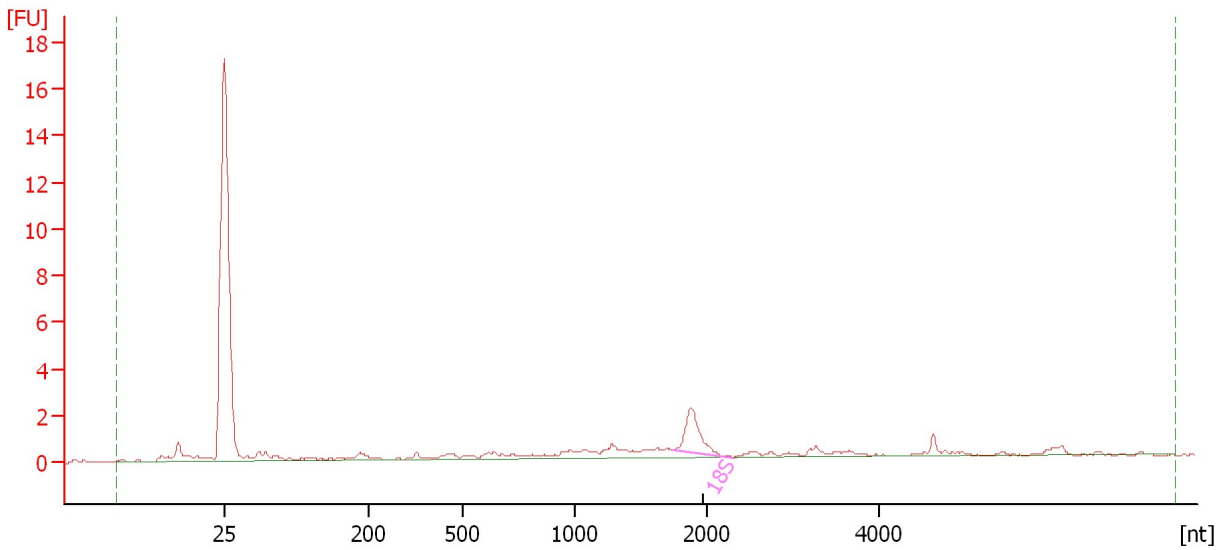
| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,782           | 2,239         | 3.3  | 28.0            |

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**

Sample 10



**Overall Results for sample 10 : Sample 10**

|                         |         |                             |   |
|-------------------------|---------|-----------------------------|---|
| RNA Area:               | 22.4    | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 9 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0     | Result Flagging Label:      | RIN N/A   |

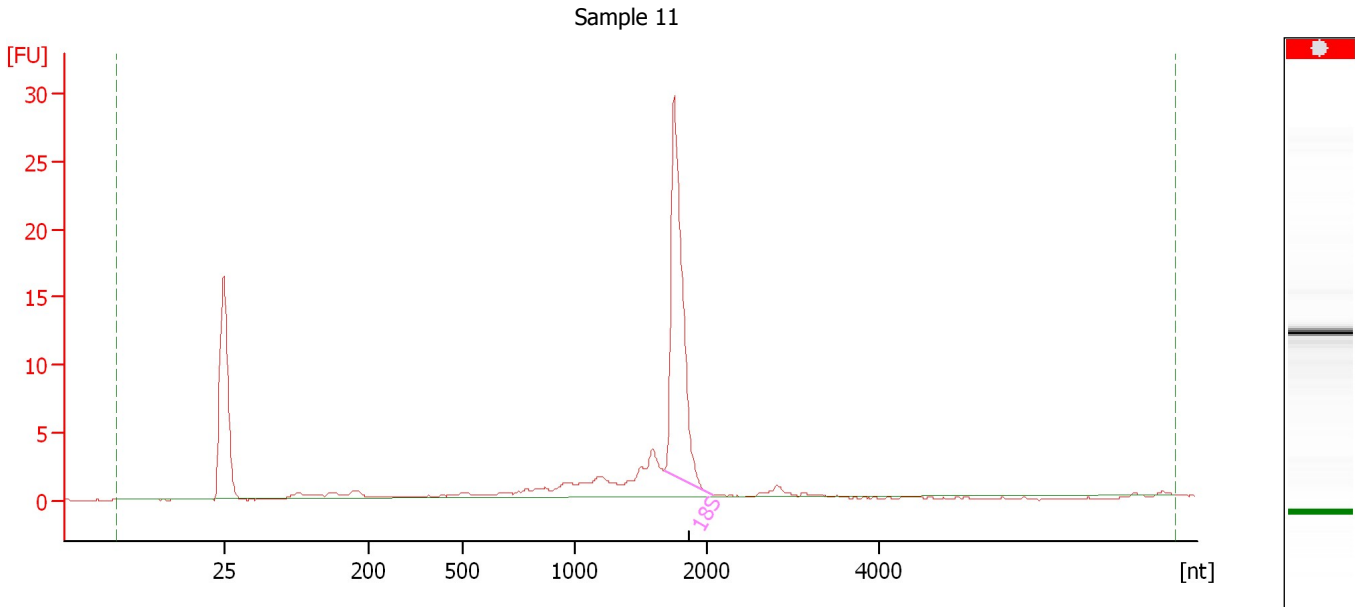
**Fragment table for sample 10 : Sample 10**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,749           | 2,301         | 3.4  | 15.0            |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
 Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Sample 11**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 72.6     | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 30 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0      | Result Flagging Label:      | RIN N/A   |

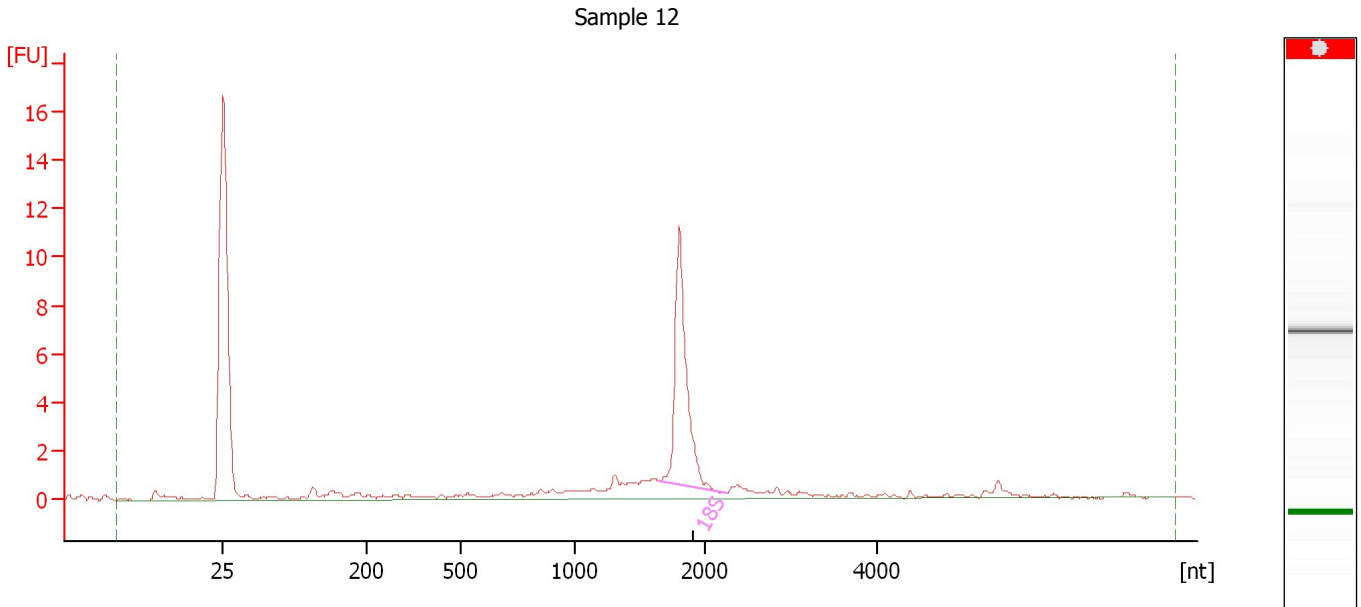
**Fragment table for sample 11 : Sample 11**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,675           | 2,065         | 36.4 | 50.2            |

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
 Modified: 12/11/2018 4:39:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : Sample 12**

|                         |          |                             |   |
|-------------------------|----------|-----------------------------|---|
| RNA Area:               | 36.7     | RNA Integrity Number (RIN): | N/A (B.02.08)   |
| RNA Concentration:      | 15 ng/μl | Result Flagging Color:      | <span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> |
| rRNA Ratio [28s / 18s]: | 0.0      | Result Flagging Label:      | RIN N/A   |

**Fragment table for sample 12 : Sample 12**

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S  | 1,649           | 2,251         | 13.9 | 38.0            |



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-11\2018-12-11\_004.xad

Created: 12/11/2018 4:16:19 PM  
Modified: 12/11/2018 4:39:22 PM

**Gel Image**

