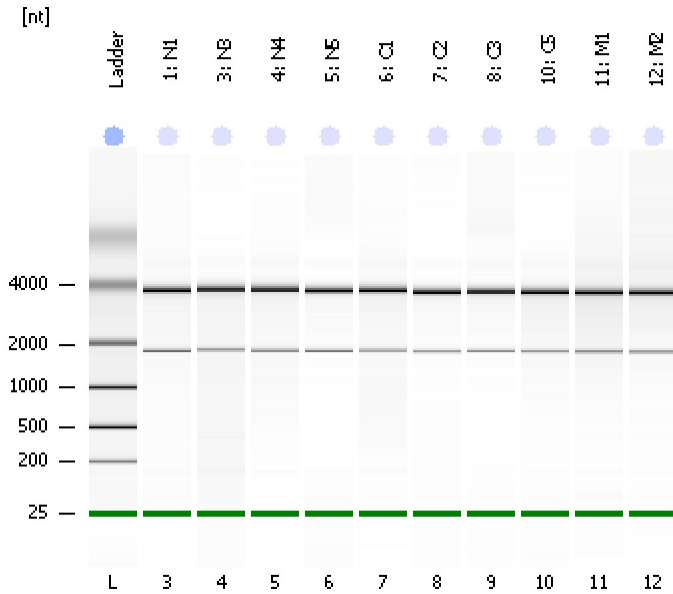


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
Modified: 9/19/2016 1:59:06 PM

Electrophoresis File Run Summary



Instrument Information:

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

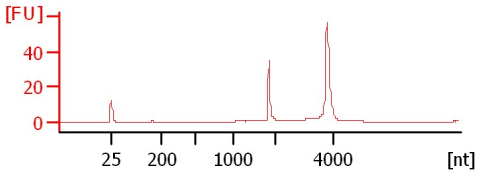
Assay Information:

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.

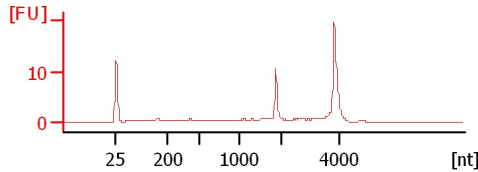
Chip Information:

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

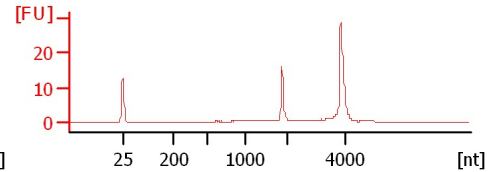
**1: N1**  
HiSeq\_671\_Total RNA QC  
RIN: 9.30



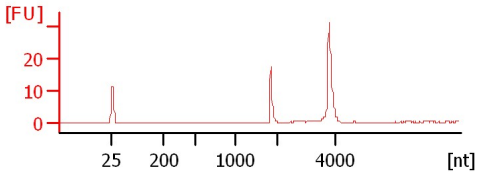
**3: N3**  
HiSeq\_671\_Total RNA QC  
RIN: 8.40



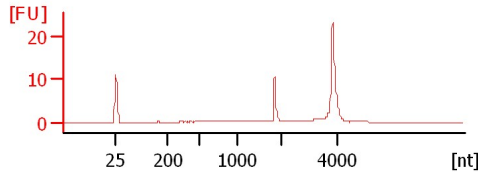
**4: N4**  
HiSeq\_671\_Total RNA QC  
RIN: 9



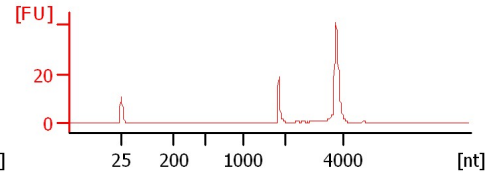
**5: N5**  
HiSeq\_671\_Total RNA QC  
RIN: 10



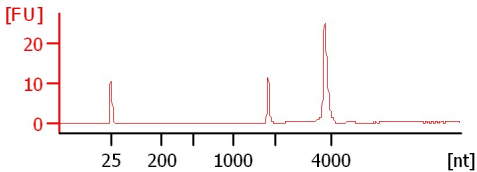
**6: C1**  
HiSeq\_671\_Total RNA QC  
RIN: 8.70



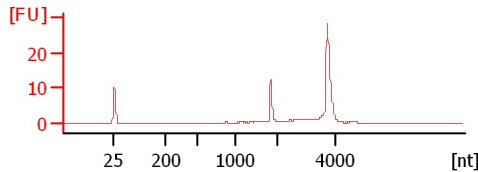
**7: C2**  
HiSeq\_671\_Total RNA QC  
RIN: 9.90



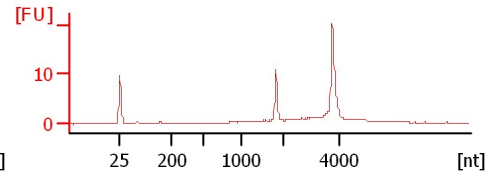
**8: C3**  
HiSeq\_671\_Total RNA QC  
RIN: 10



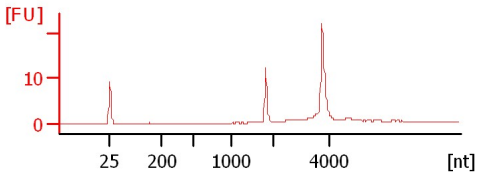
**10: C5**  
HiSeq\_671\_Total RNA QC  
RIN: 9.30



**11: M1**  
HiSeq\_671\_Total RNA QC  
RIN: 9.20



**12: M2**  
HiSeq\_671\_Total RNA QC  
RIN: 10



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
Modified: 9/19/2016 1:59:06 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
1: N1	HiSeq_671_Total RNA QC	✓	RIN: 9.30	
3: N3	HiSeq_671_Total RNA QC	✓	RIN: 8.40	
4: N4	HiSeq_671_Total RNA QC	✓	RIN:9	
5: N5	HiSeq_671_Total RNA QC	✓	RIN:10	
6: C1	HiSeq_671_Total RNA QC	✓	RIN: 8.70	
7: C2	HiSeq_671_Total RNA QC	✓	RIN: 9.90	
8: C3	HiSeq_671_Total RNA QC	✓	RIN:10	
10: C5	HiSeq_671_Total RNA QC	✓	RIN: 9.30	
11: M1	HiSeq_671_Total RNA QC	✓	RIN: 9.20	
12: M2	HiSeq_671_Total RNA QC	✓	RIN:10	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
Modified: 9/19/2016 1:59:06 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

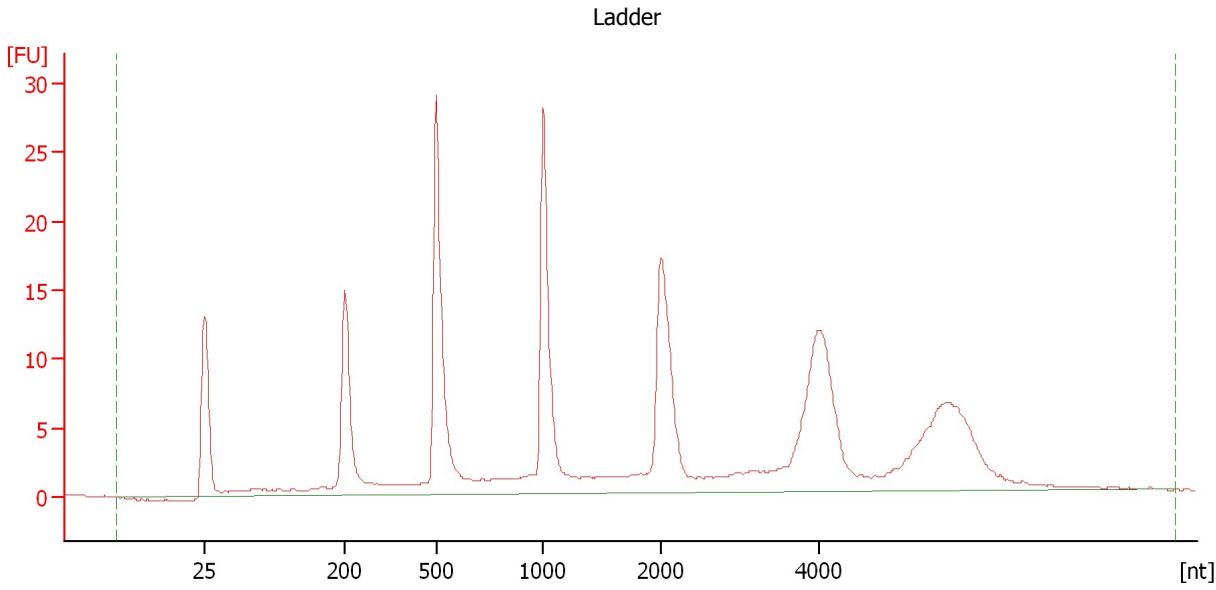
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary**



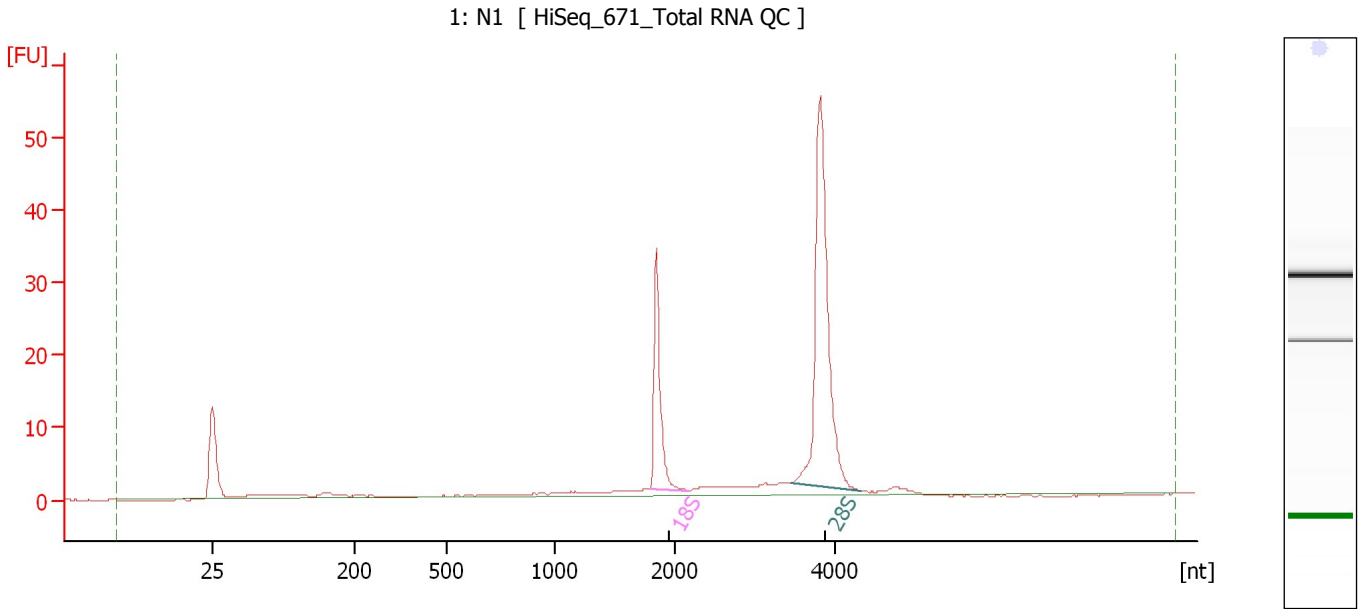
**Overall Results for Ladder**

RNA Area:	250.9	Result Flagging Color:	<span style="background-color: #6699ff; 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:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 1: N1**

RNA Area:	145.1	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	87 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]:	2.8	Result Flagging Label:	RIN: 9.30

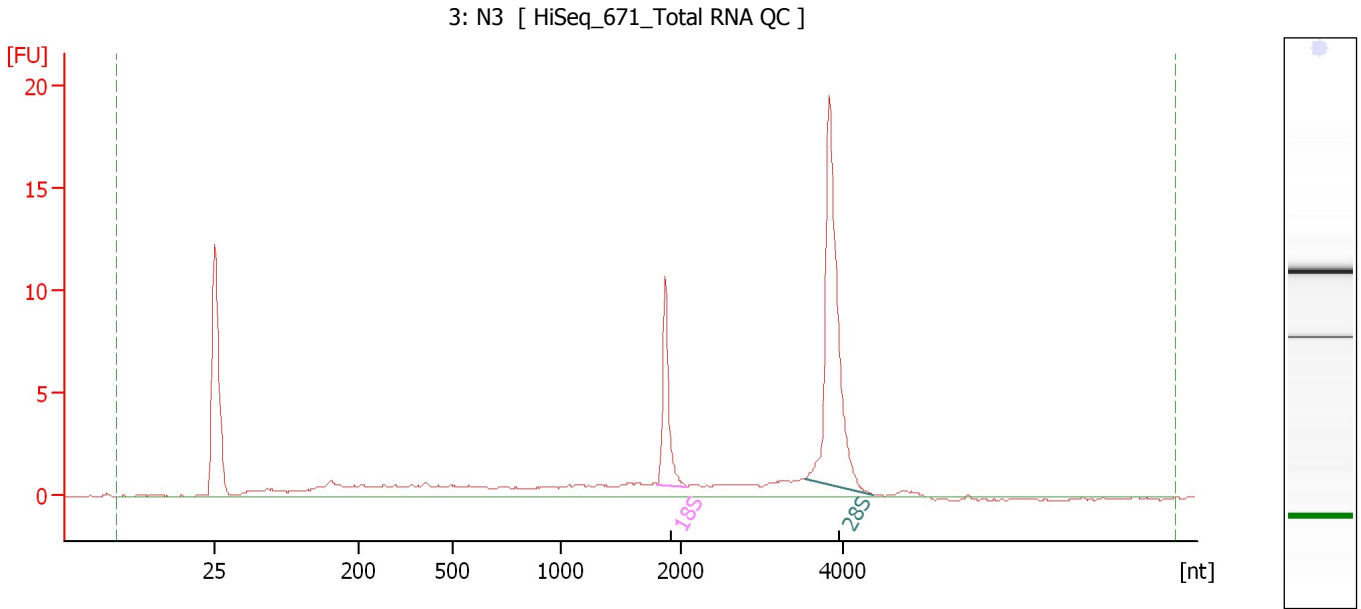
**Fragment table for sample 3 : 1: N1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,790	2,181	24.4	16.8
28S	3,433	4,325	67.8	46.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 3: N3**

RNA Area:	70.3	RNA Integrity Number (RIN):	8.4 (B.02.08)
RNA Concentration:	42 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]:	3.2	Result Flagging Label:	RIN: 8.40

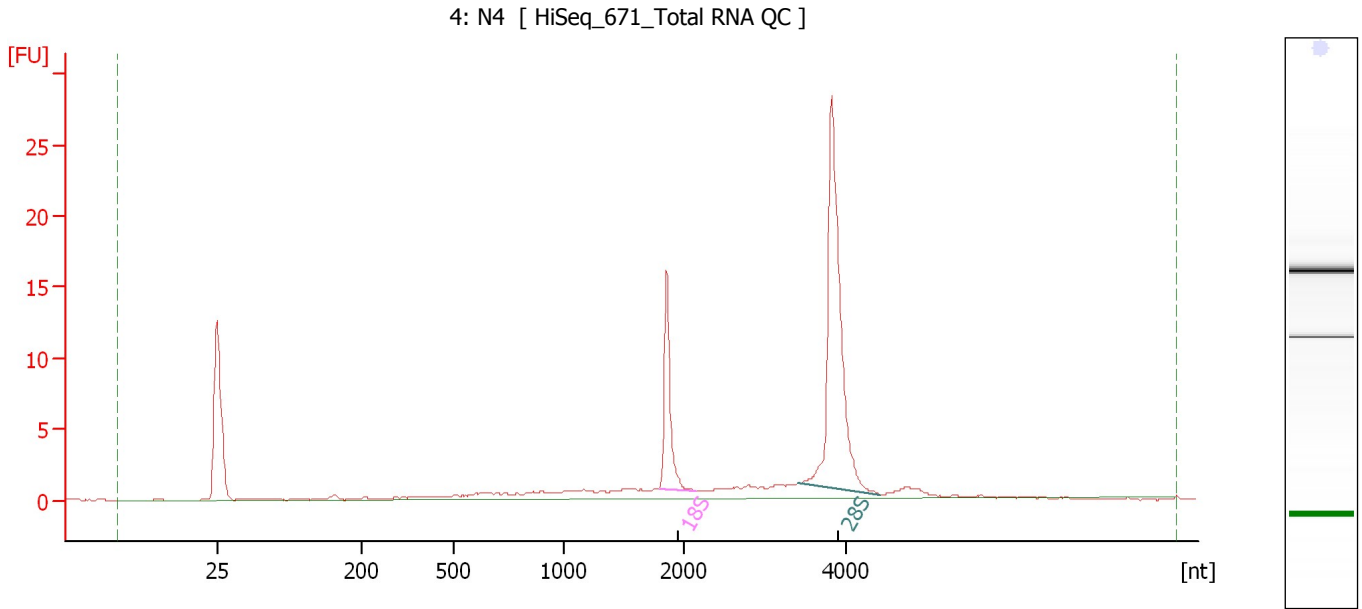
**Fragment table for sample 4 : 3: N3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,803	2,078	7.4	10.5
28S	3,521	4,368	23.4	33.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 4: N4**

RNA Area:	80.6	RNA Integrity Number (RIN):	9 (B.02.08)
RNA Concentration:	48 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]:	3.1	Result Flagging Label:	RIN:9

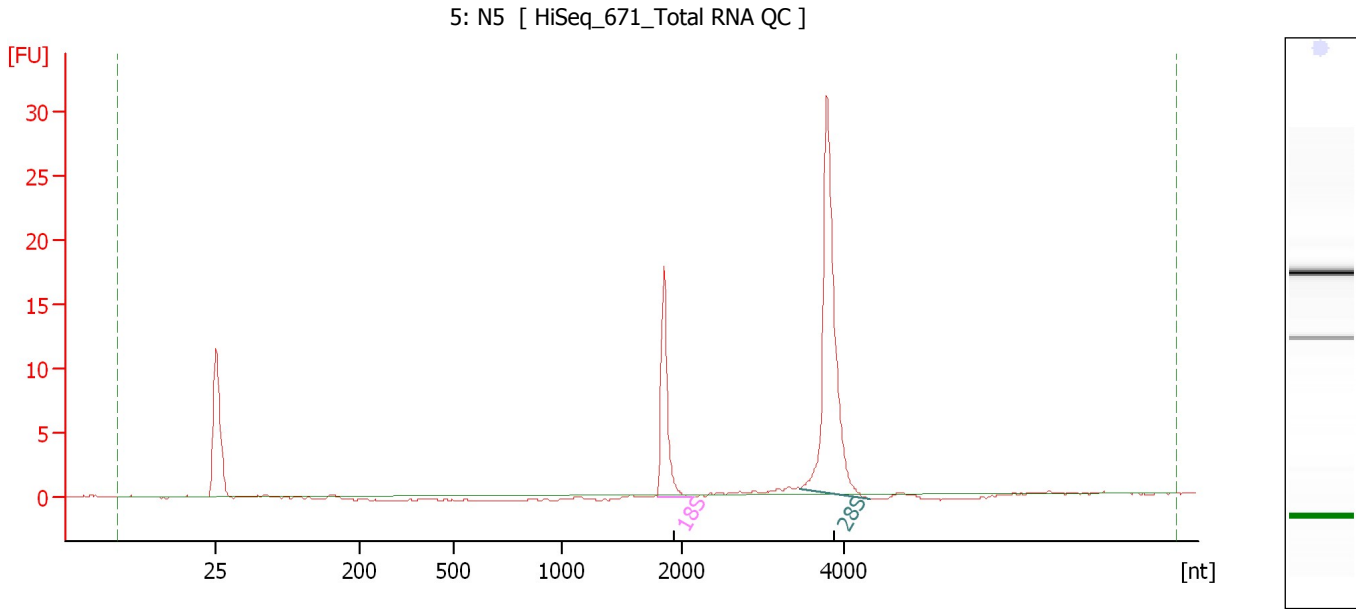
**Fragment table for sample 5 : 4: N4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,796	2,132	11.3	14.1
28S	3,413	4,430	34.7	43.1

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 5: N5**

RNA Area:	52.8	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	32 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]:	2.9	Result Flagging Label:	RIN:10

**Fragment table for sample 6 : 5: N5**

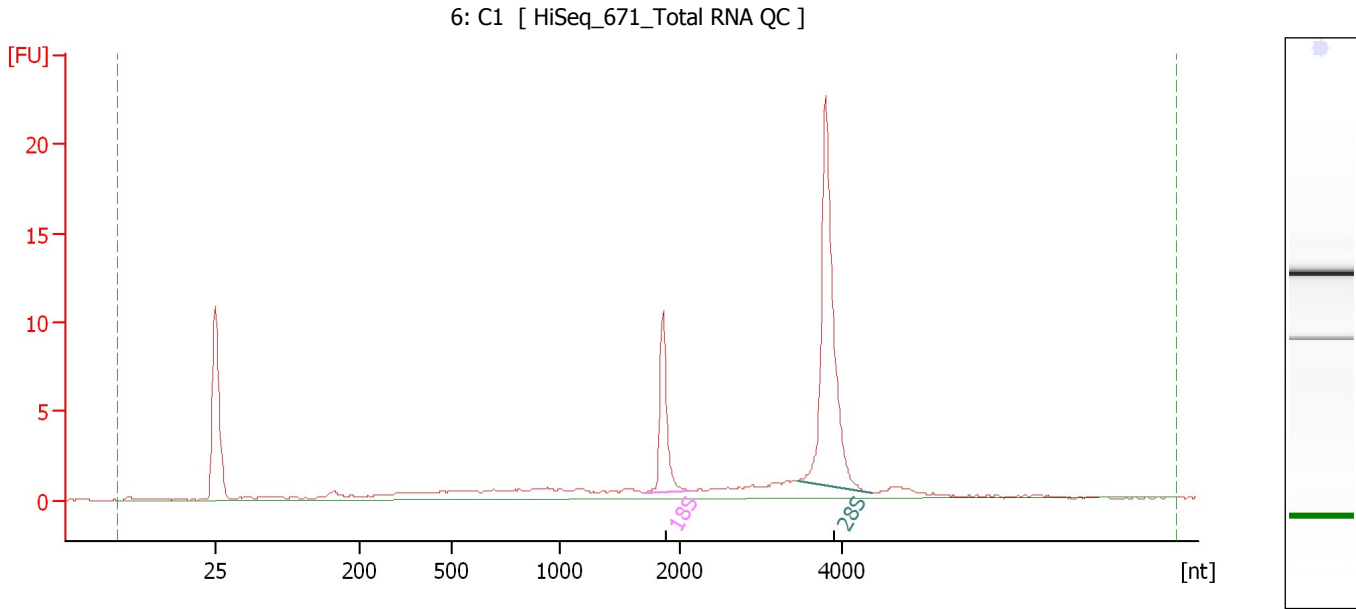
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,794	2,118	12.9	24.5
28S	3,455	4,315	37.0	70.1



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 6: C1**

RNA Area:	69.4	RNA Integrity Number (RIN):	8.7 (B.02.08)
RNA Concentration:	42 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]:	3.3	Result Flagging Label:	RIN: 8.70

**Fragment table for sample 7 : 6: C1**

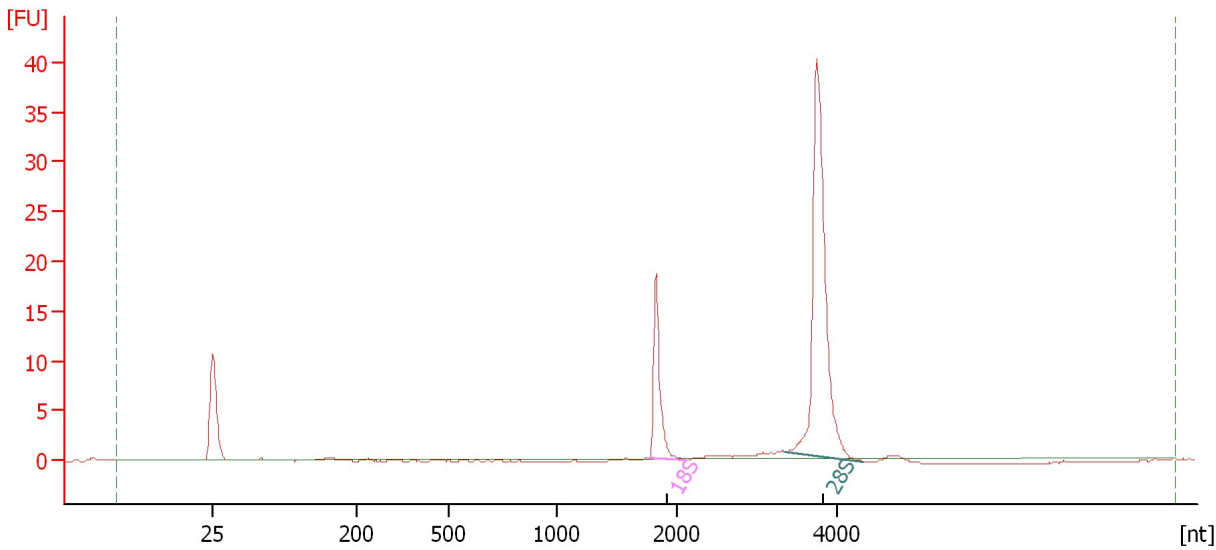
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,695	2,130	8.1	11.7
28S	3,470	4,385	26.7	38.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**

7: C2 [ HiSeq\_671\_Total RNA QC ]



**Overall Results for sample 8 : 7: C2**

RNA Area:	69.6	RNA Integrity Number (RIN):	9.9 (B.02.08)
RNA Concentration:	42 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]:	3.6	Result Flagging Label:	RIN: 9.90

**Fragment table for sample 8 : 7: C2**

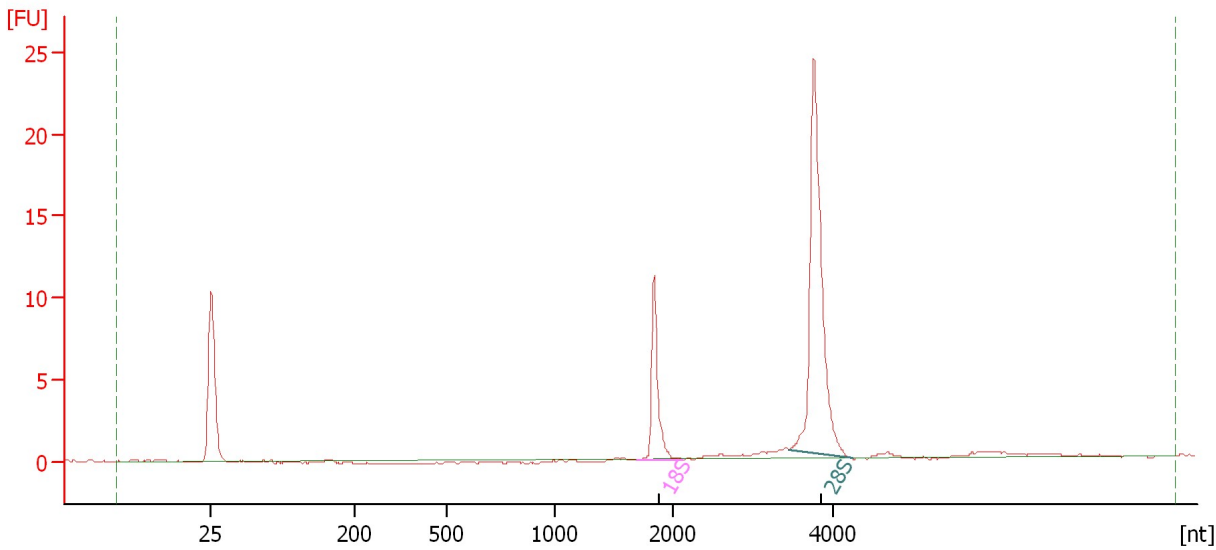
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,765	2,103	13.9	20.0
28S	3,352	4,322	49.8	71.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**

8: C3 [ HiSeq\_671\_Total RNA QC ]



**Overall Results for sample 9 : 8: C3**

RNA Area:	42.2	RNA Integrity Number (RIN):	10 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	25 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]:	3.2	Result Flagging Label:	RIN:10

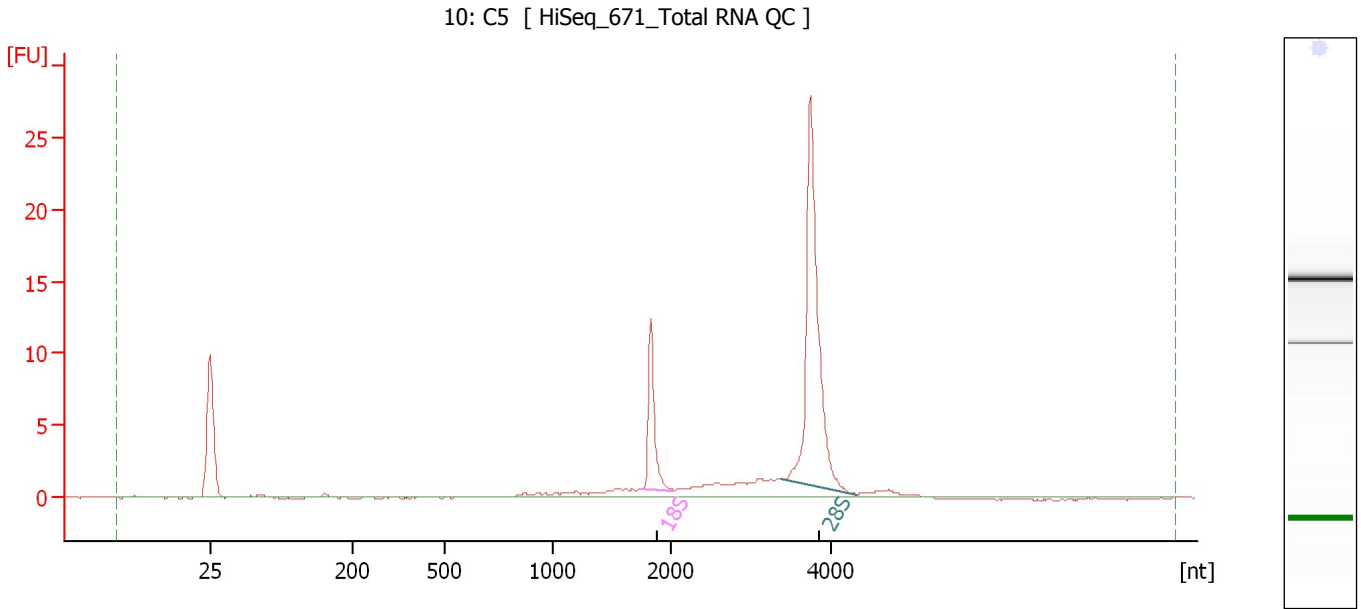
**Fragment table for sample 9 : 8: C3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,699	2,127	8.9	21.0
28S	3,435	4,236	28.7	68.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 10: C5**

RNA Area:	65.6	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	39 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]:	3.6	Result Flagging Label:	RIN: 9.30

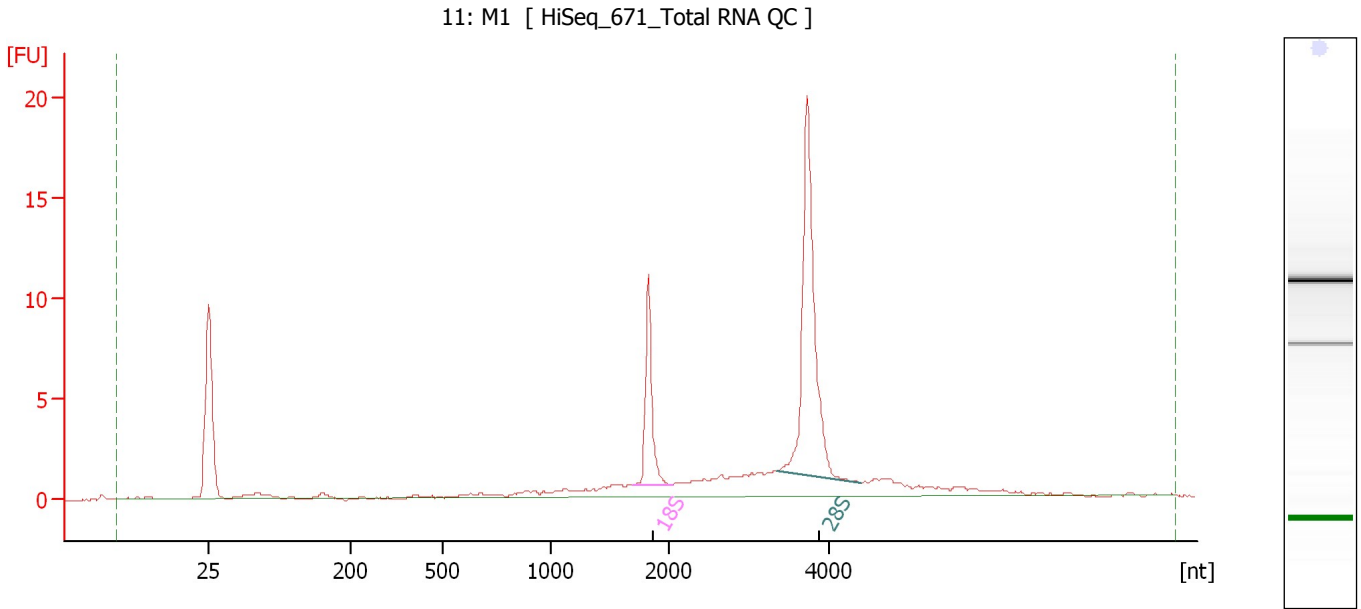
**Fragment table for sample 10 : 10: C5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,743	2,033	9.1	13.9
28S	3,370	4,319	33.1	50.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 11: M1**

RNA Area:	62.6	RNA Integrity Number (RIN):	9.2 (B.02.08)
RNA Concentration:	37 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]:	2.9	Result Flagging Label:	RIN: 9.20

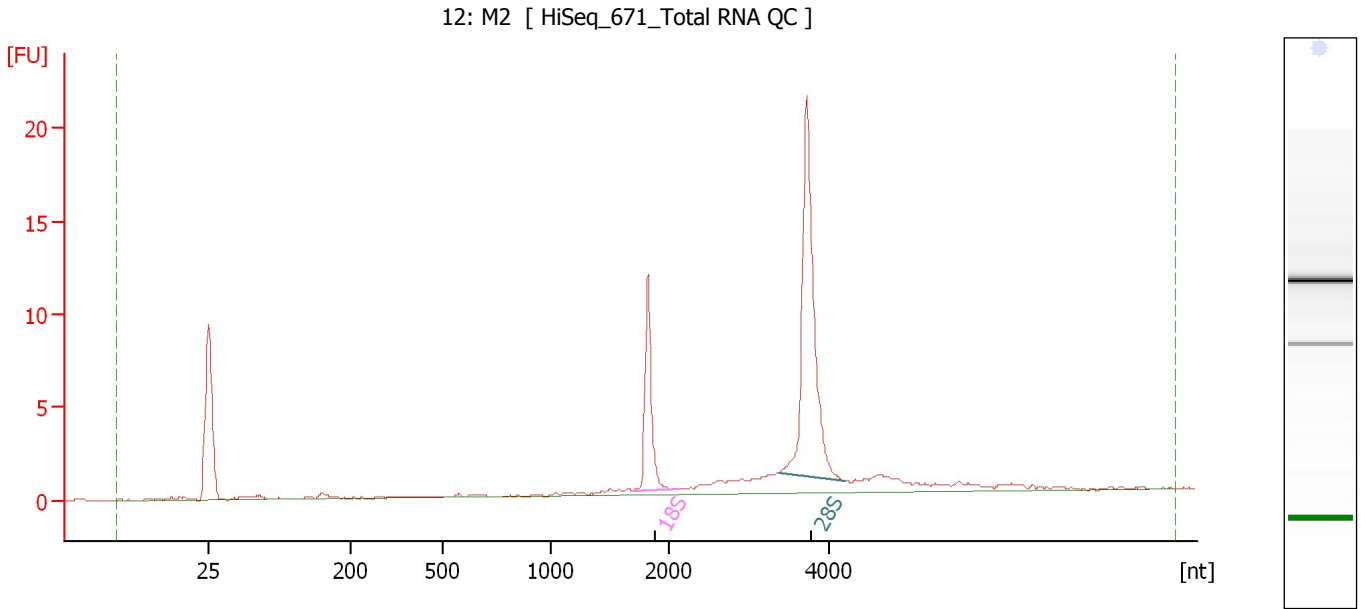
**Fragment table for sample 11 : 11: M1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,687	2,045	8.1	12.9
28S	3,358	4,403	23.0	36.8

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 12: M2**

RNA Area: 55.7                      RNA Integrity Number (RIN): 10 (B.02.08)  
 RNA Concentration: 33 ng/μl              Result Flagging Color:   
 rRNA Ratio [28s / 18s]: 2.7              Result Flagging Label: RIN:10

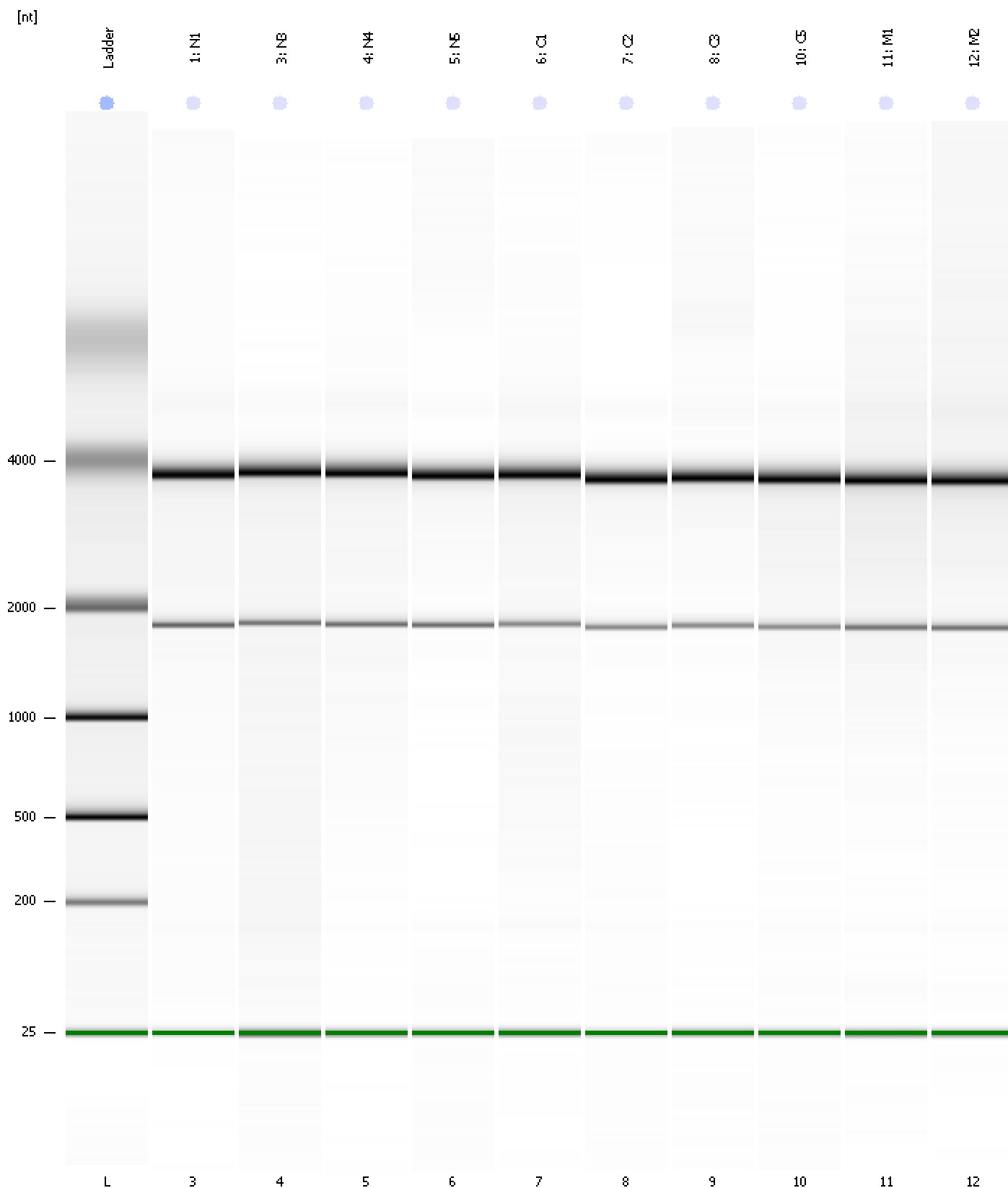
**Fragment table for sample 12 : 12: M2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,687	2,125	8.9	15.9
28S	3,371	4,202	24.4	43.8

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
Modified: 9/19/2016 1:59:06 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...data\2016-09-19\2016-09-19\_002\_HiSeq671\_TotalRNAQC\_1of2.xad

Created: 9/19/2016 12:31:26 PM  
 Modified: 9/19/2016 1:59:06 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		9/19/2016 12:55:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-09-19\2016-09-19_002.xad)		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/19/2016 12:31:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1