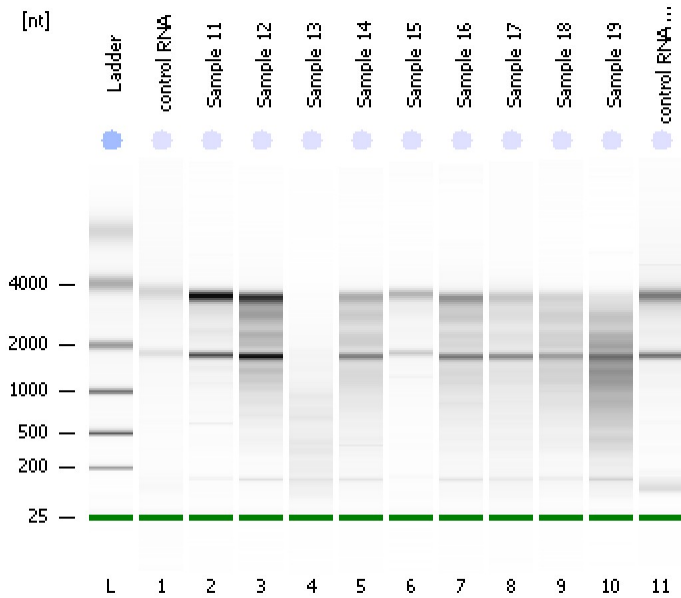


Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 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 Pico Series II.xsy

Assay Class: Eukaryote Total RNA Pico

Version: 2.6

Assay Comments: Total RNA Analysis pg sensitivity (Eukaryote)

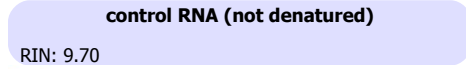
© Copyright 2003 - 2009 Agilent Technologies, Inc.

Chip Information:

Chip Lot #:

Reagent Kit Lot #:

Chip Comments:



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
control RNA		✓	RIN: 8.10	
Sample 11		✓	RIN: 9.60	
Sample 12		✓	RIN: 7.20	
Sample 13		✓	RIN: 1.60	
Sample 14		✓	RIN: 6.70	
Sample 15		✓	RIN: 8.40	
Sample 16		✓	RIN: 6.90	
Sample 17		✓	RIN:7	
Sample 18		✓	RIN: 5.20	
Sample 19		✓	RIN: 3.80	
control RNA (not denatured)		✓	RIN: 9.70	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

## Electrophoresis Assay Details

### General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 17  
Maximum Visible Range [s] : 70  
Start Analysis Time Range [s] : 18  
End Analysis Time Range [s] : 69  
Ladder Concentration [pg/ $\mu$ l] : 1000  
Lower Marker Concentration [pg/ $\mu$ l] : 0  
Upper Marker Concentration [pg/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 18  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.3  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

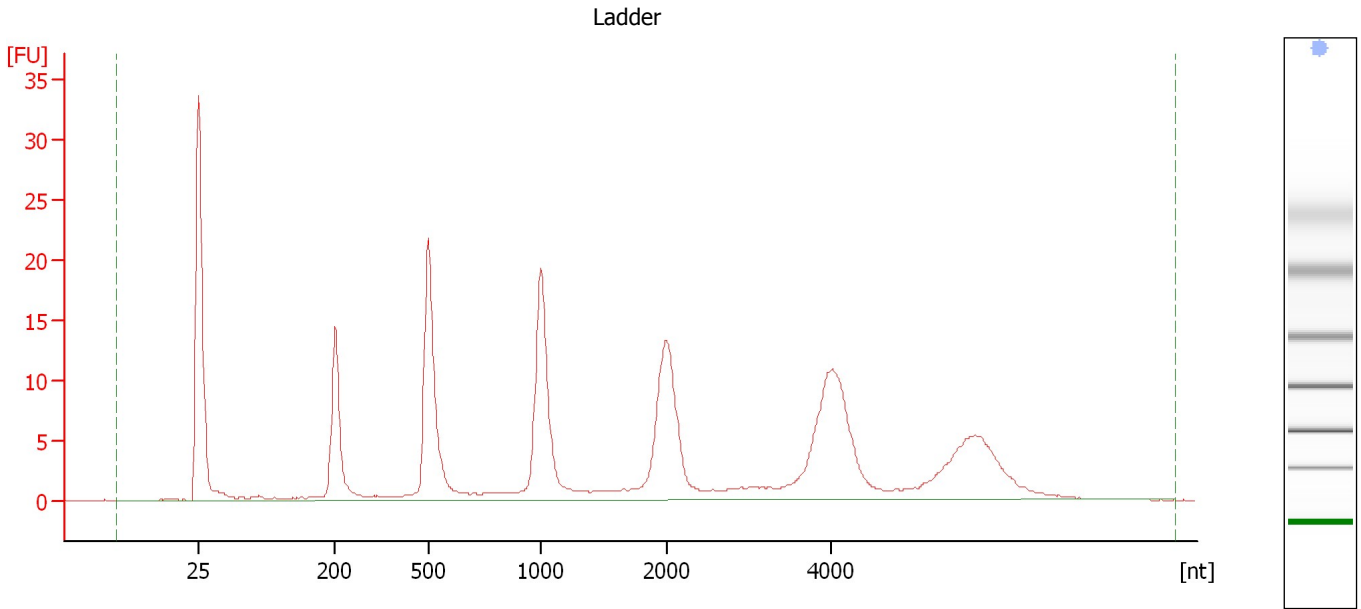
### Ladder

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

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary**



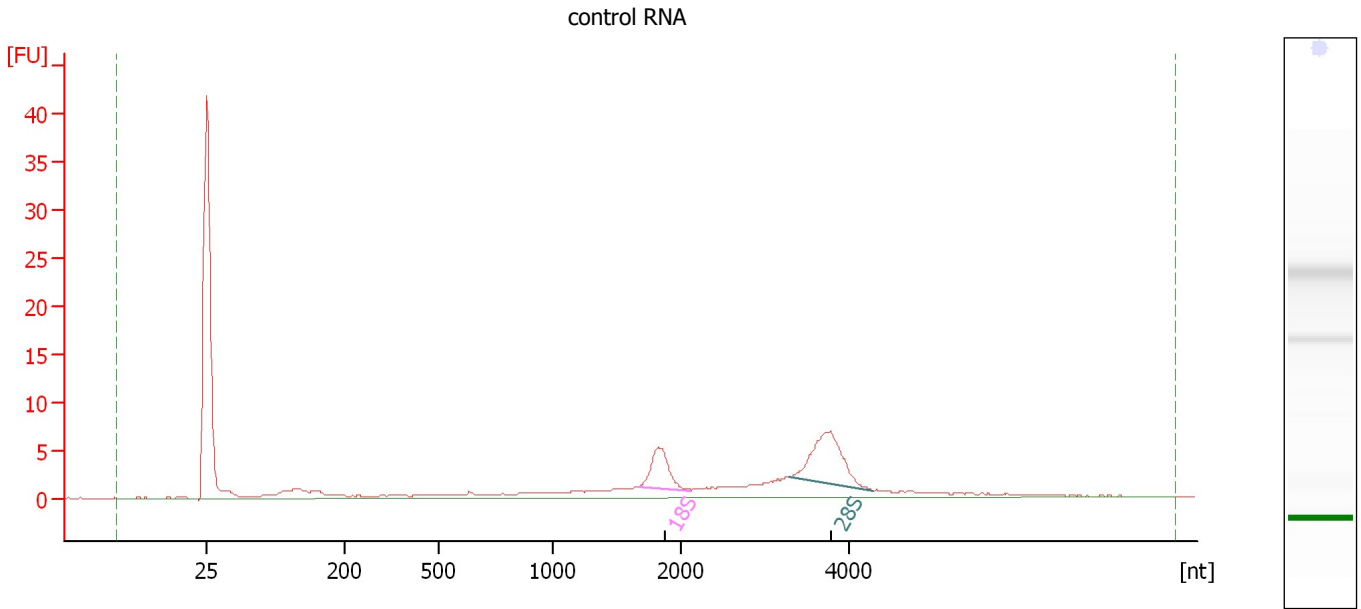
**Overall Results for Ladder**

RNA Area:	221.3	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	1,000 pg/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : control RNA**

RNA Area:	84.3	RNA Integrity Number (RIN):	8.1 (B.02.08)
RNA Concentration:	381 pg/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]:	1.9	Result Flagging Label:	RIN: 8.10

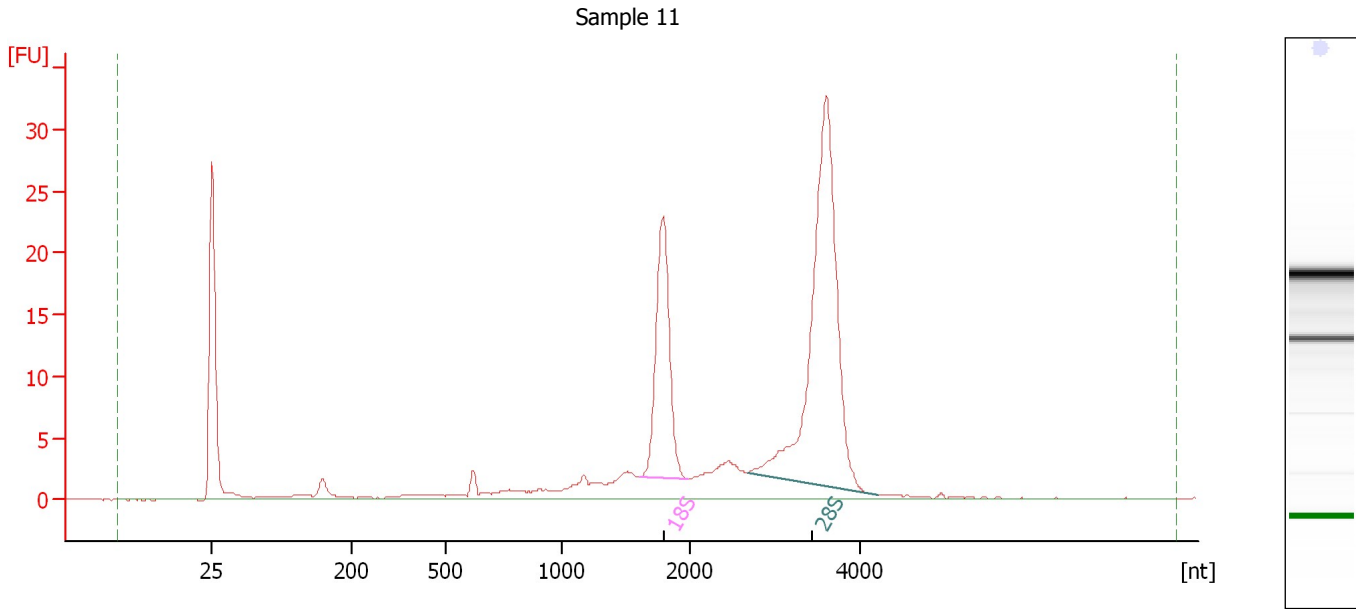
**Fragment table for sample 1 : control RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,675	2,132	8.9	10.6
28S	3,276	4,281	17.1	20.3

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Sample 11**

RNA Area:	184.1	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	832 pg/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]:	2.4	Result Flagging Label:	RIN: 9.60

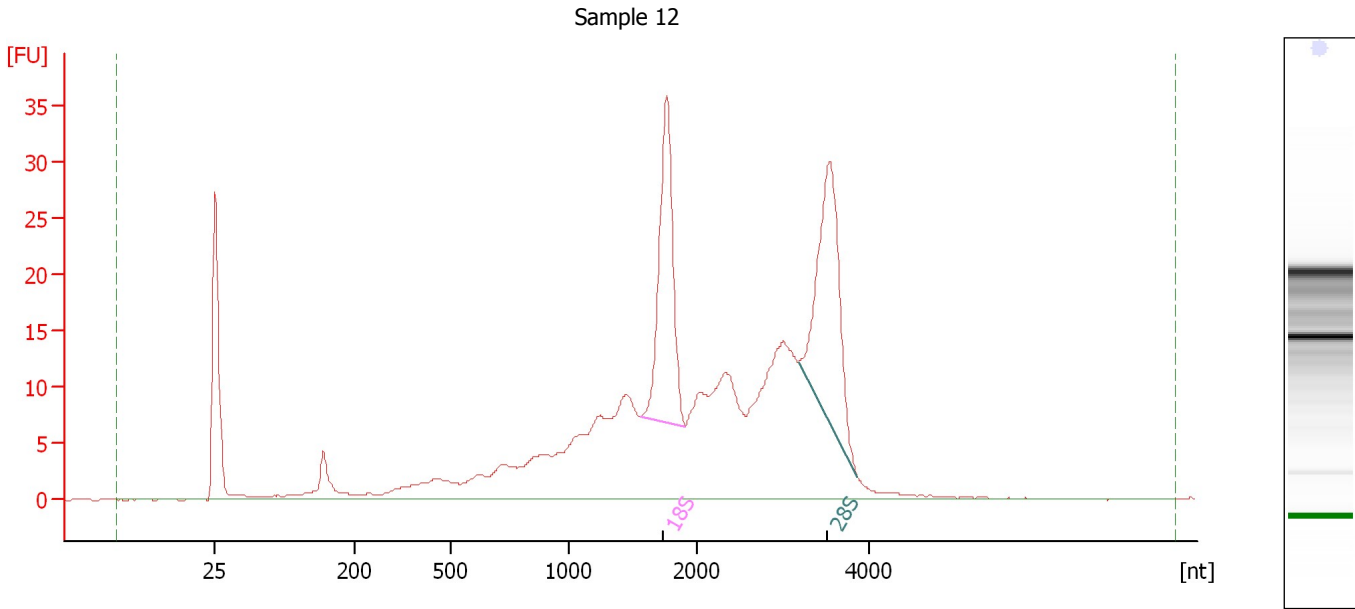
**Fragment table for sample 2 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,605	1,989	34.4	18.7
28S	2,677	4,215	81.2	44.1

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Sample 12**

RNA Area:	405.9	RNA Integrity Number (RIN):	7.2 (B.02.08)
RNA Concentration:	1,834 pg/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: 7.20

**Fragment table for sample 3 : Sample 12**

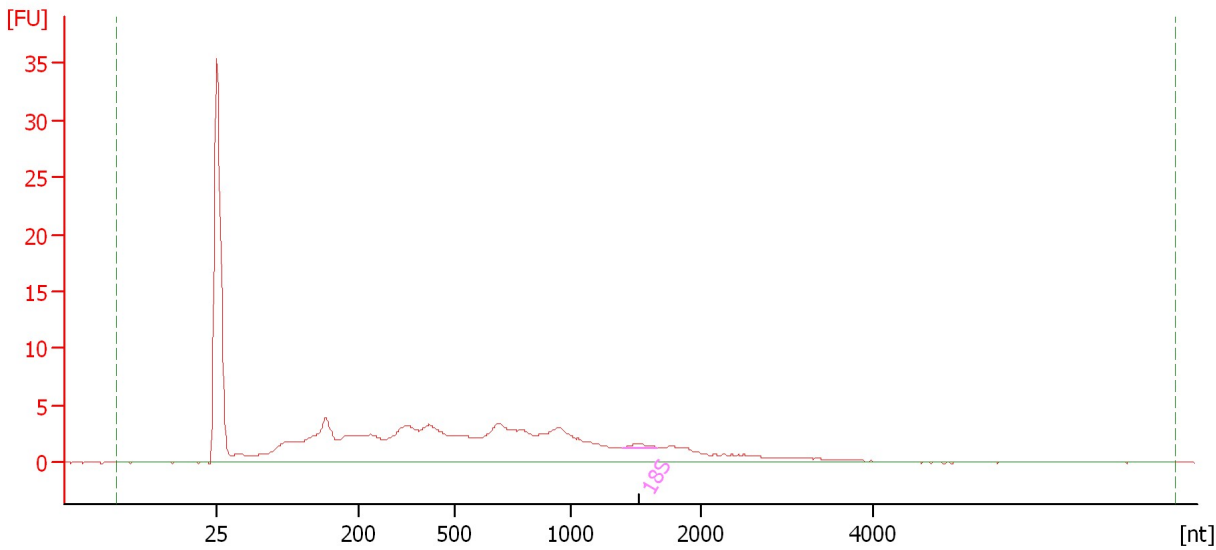
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,560	1,908	47.2	11.6
28S	3,187	3,874	50.9	12.5

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**

Sample 13



**Overall Results for sample 4 : Sample 13**

RNA Area:	134.4	RNA Integrity Number (RIN):	1.6 (B.02.08)
RNA Concentration:	607 µg/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: 1.60

**Fragment table for sample 4 : Sample 13**

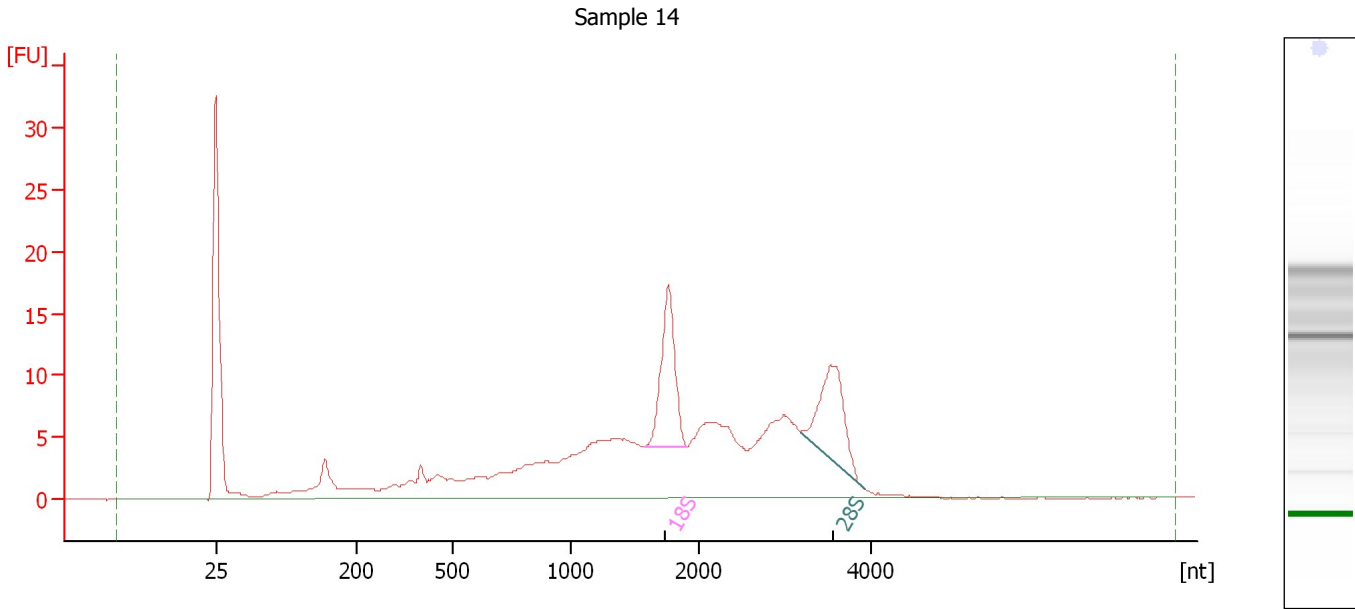
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,398	1,662	0.7	0.5



Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
 Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Sample 14**

RNA Area:	236.7	RNA Integrity Number (RIN):	6.7 (B.02.08)
RNA Concentration:	1,070 pg/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]:	0.9	Result Flagging Label:	RIN: 6.70

**Fragment table for sample 5 : Sample 14**

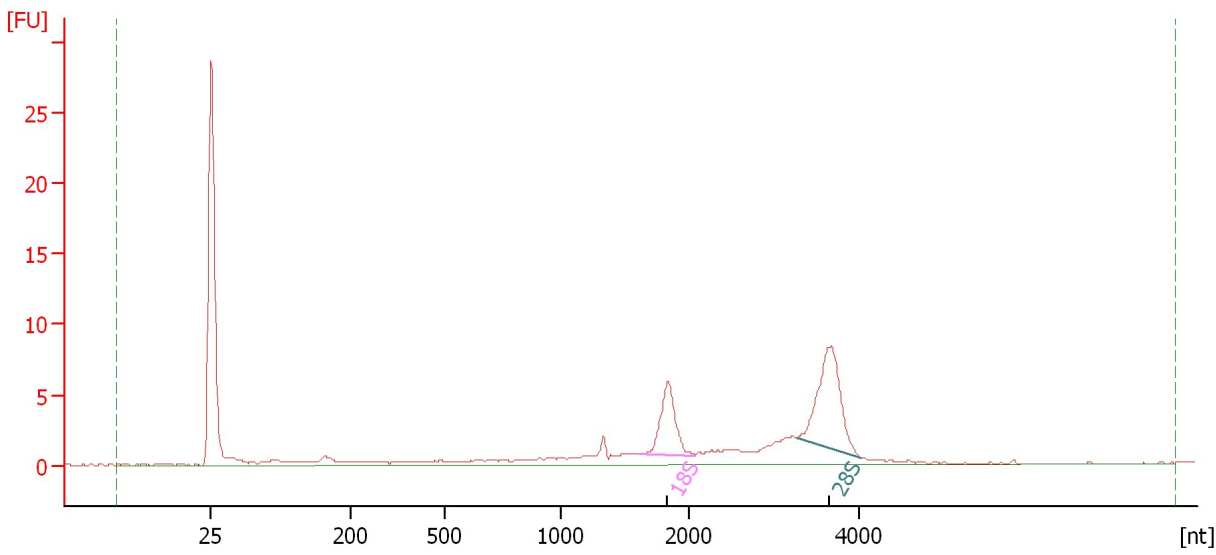
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,578	1,909	21.2	9.0
28S	3,185	3,934	19.0	8.0

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**

Sample 15



**Overall Results for sample 6 : Sample 15**

RNA Area:	66.5	RNA Integrity Number (RIN):	8.4 (B.02.08)
RNA Concentration:	300 µg/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]:	1.8	Result Flagging Label:	RIN: 8.40

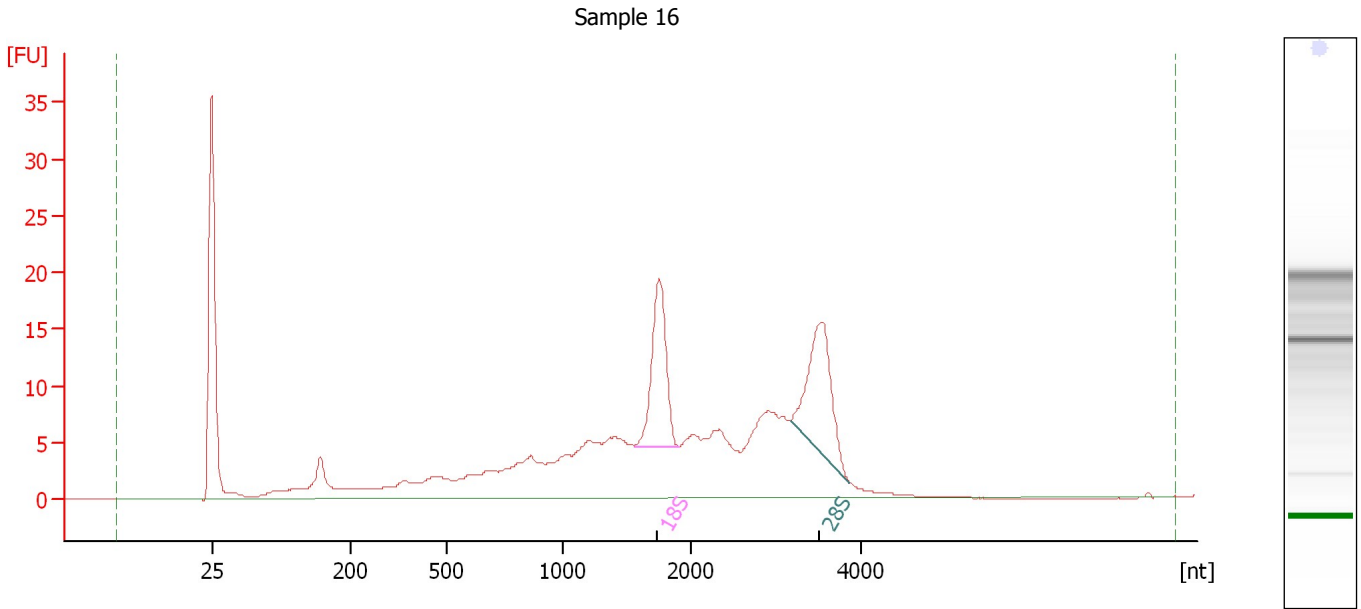
**Fragment table for sample 6 : Sample 15**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,605	2,071	9.3	13.9
28S	3,269	4,025	16.6	25.0

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Sample 16**

RNA Area:	269.5	RNA Integrity Number (RIN):	6.9 (B.02.08)
RNA Concentration:	1,218 pg/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: 6.90

**Fragment table for sample 7 : Sample 16**

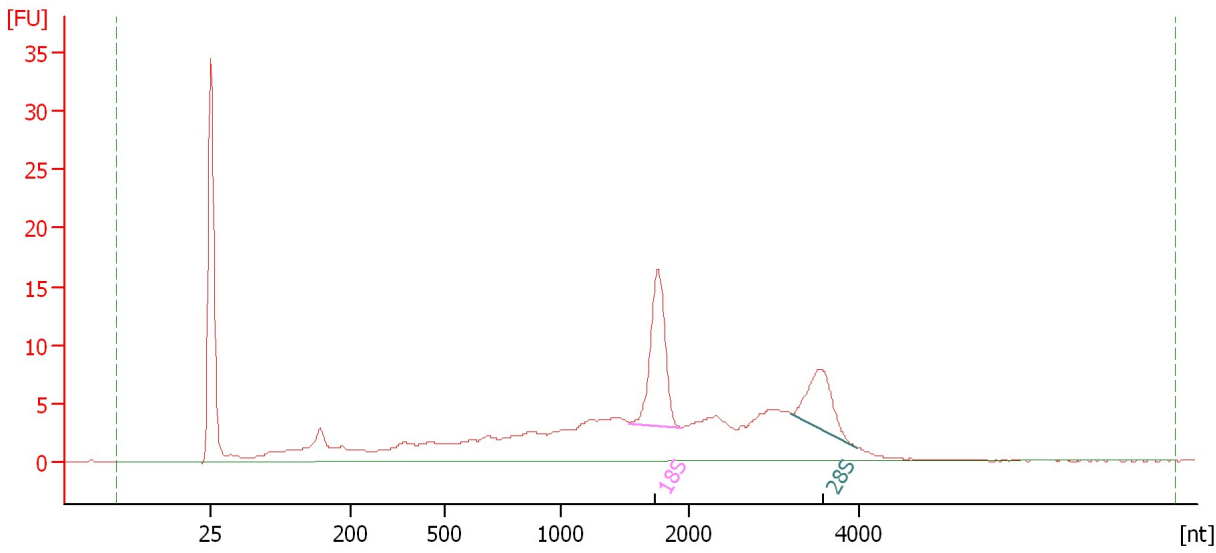
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,556	1,898	25.1	9.3
28S	3,167	3,871	27.3	10.1

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**

Sample 17



**Overall Results for sample 8 : Sample 17**

RNA Area:	197.3	RNA Integrity Number (RIN):	7 (B.02.08)
RNA Concentration:	892 pg/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]:	0.5	Result Flagging Label:	RIN:7

**Fragment table for sample 8 : Sample 17**

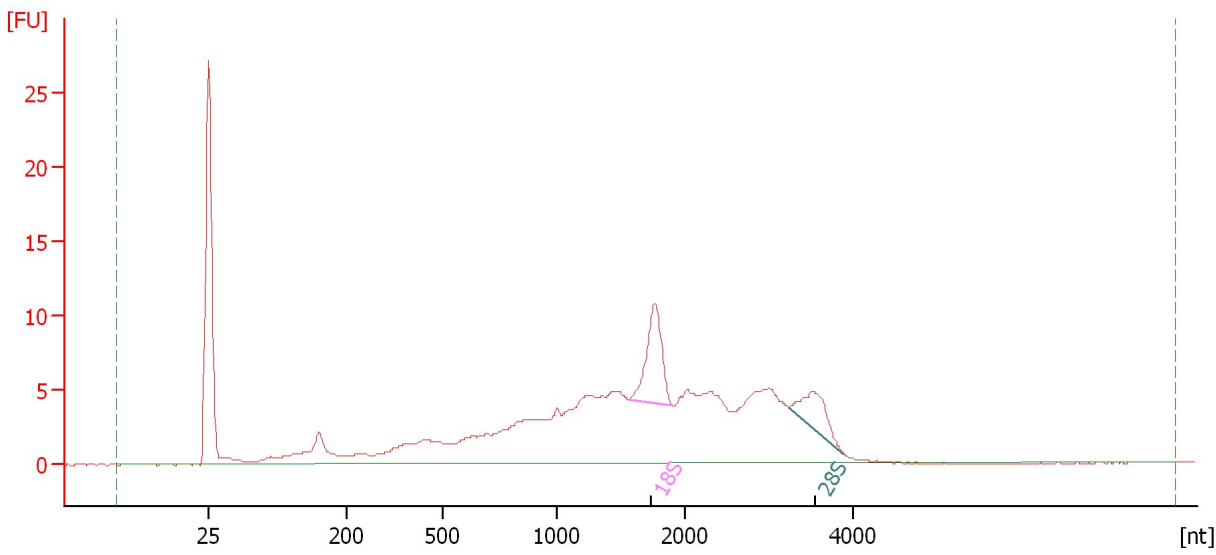
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,538	1,939	23.6	12.0
28S	3,206	3,988	12.7	6.5

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**

Sample 18



**Overall Results for sample 9 : Sample 18**

RNA Area: 192.8                      RNA Integrity Number (RIN): 5.2 (B.02.08)  
RNA Concentration: 871 pg/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.5                      Result Flagging Label: RIN: 5.20

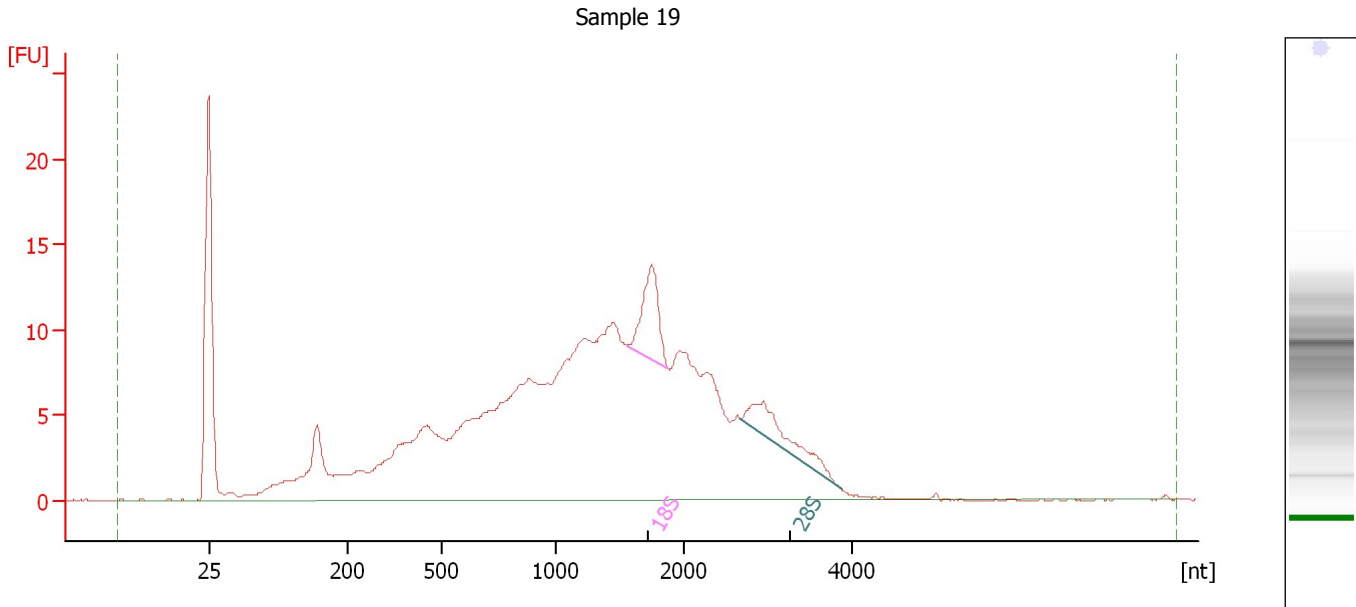
**Fragment table for sample 9 : Sample 18**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,560	1,920	12.3	6.4
28S	3,235	3,880	6.4	3.3

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
 Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Sample 19**

RNA Area:	346.0	RNA Integrity Number (RIN):	3.8 (B.02.08)
RNA Concentration:	1,564 pg/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]:	0.8	Result Flagging Label:	RIN: 3.80

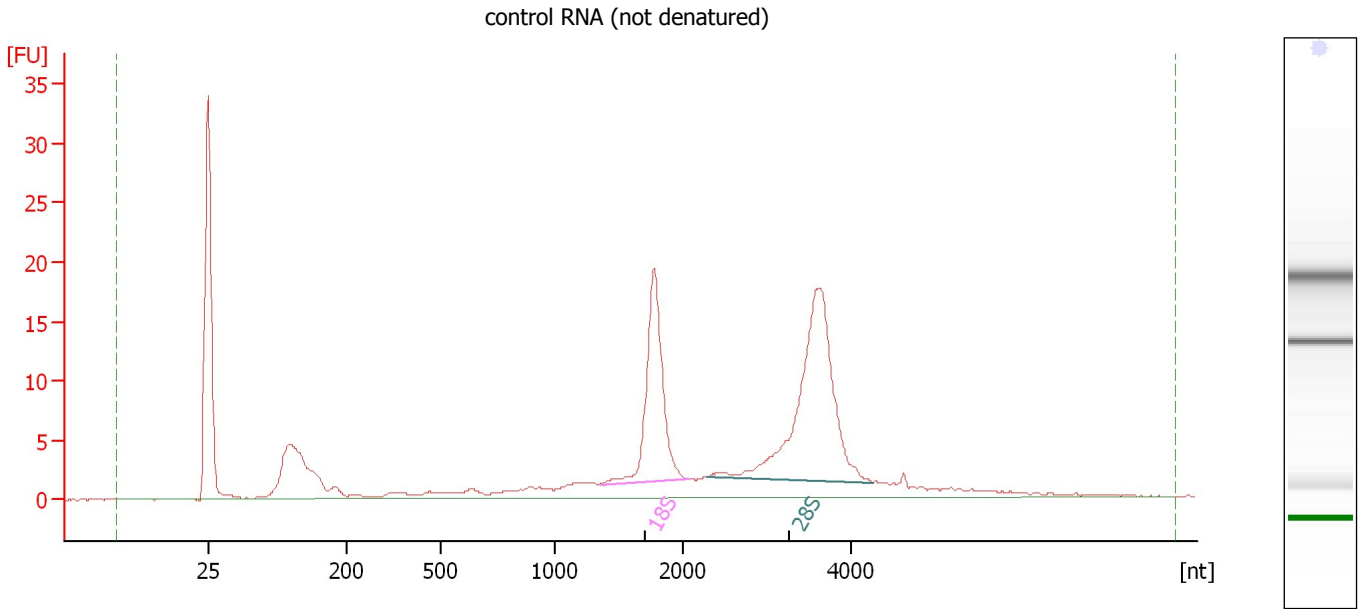
**Fragment table for sample 10 : Sample 19**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,558	1,878	10.7	3.1
28S	2,678	3,871	8.2	2.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : control RNA (not denatured)**

RNA Area:	189.4	RNA Integrity Number (RIN):	9.7 (B.02.08)
RNA Concentration:	856 µg/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]:	1.7	Result Flagging Label:	RIN: 9.70

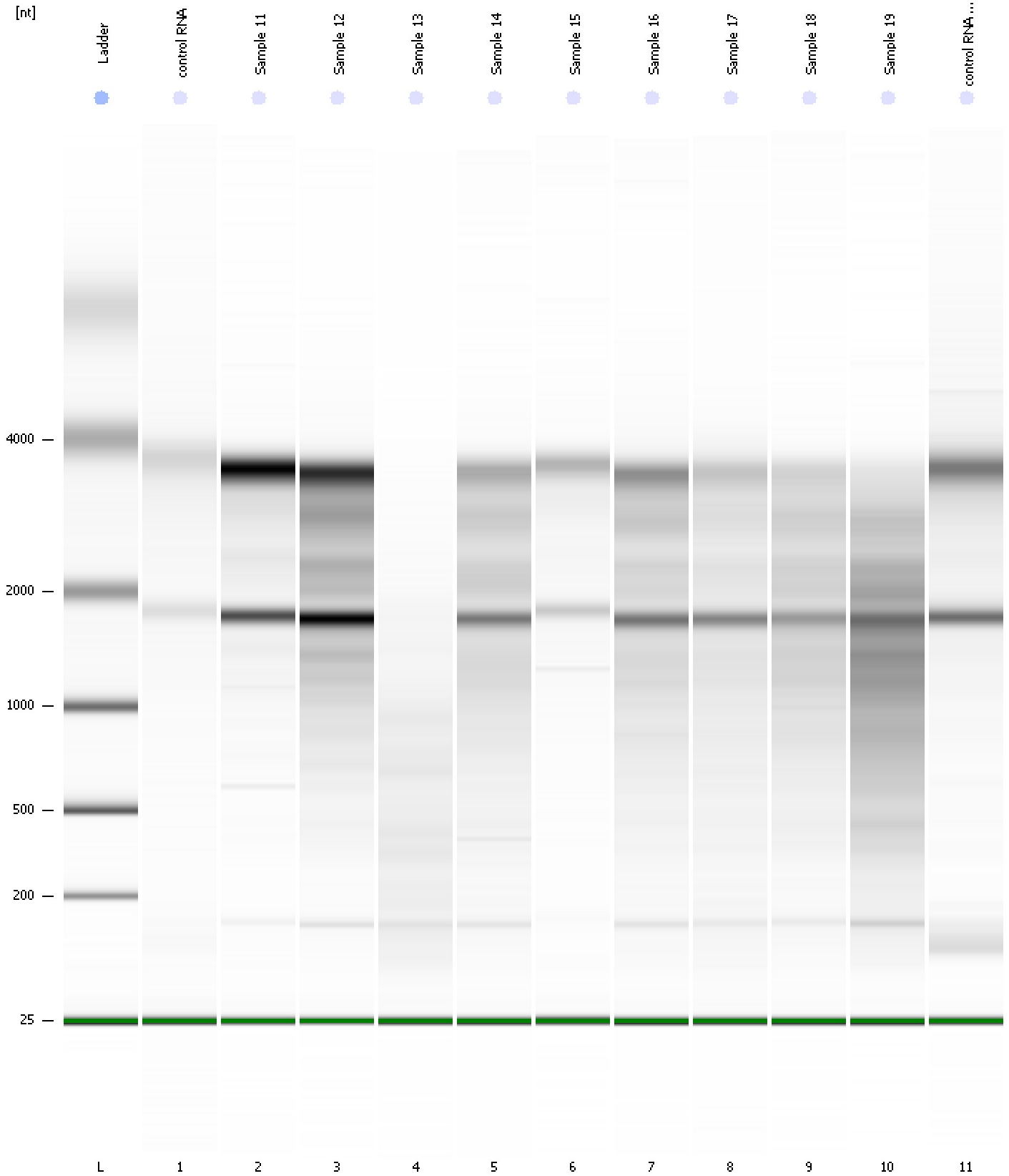
**Fragment table for sample 11 : control RNA (not denatured)**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,357	2,069	34.4	18.2
28S	2,285	4,251	58.1	30.7

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Gel Image**



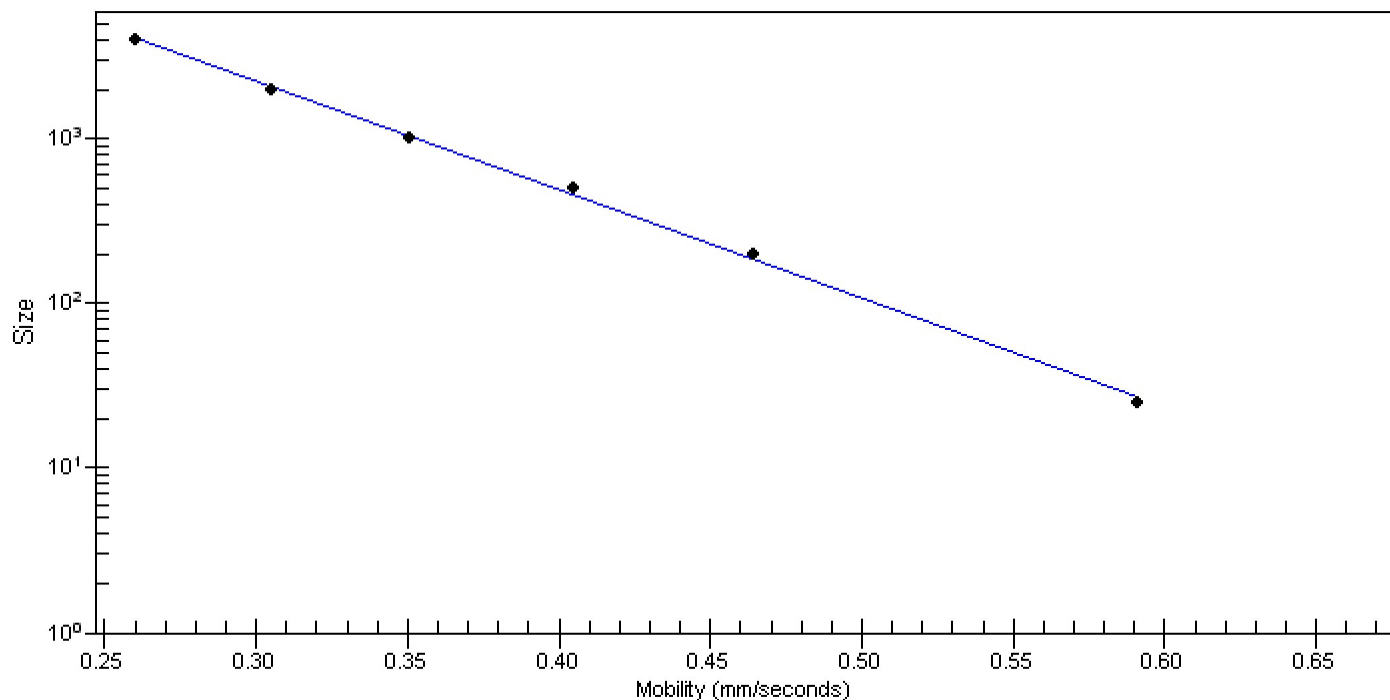


Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
Modified: 10/23/2015 2:11:35 PM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-23\2015-10-23\_002.xad

Created: 10/23/2015 1:49:26 PM  
 Modified: 10/23/2015 2:11:35 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		10/23/2015 2:11:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-10-23\2015-10-23_002.xad)		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/23/2015 1:49:31 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1