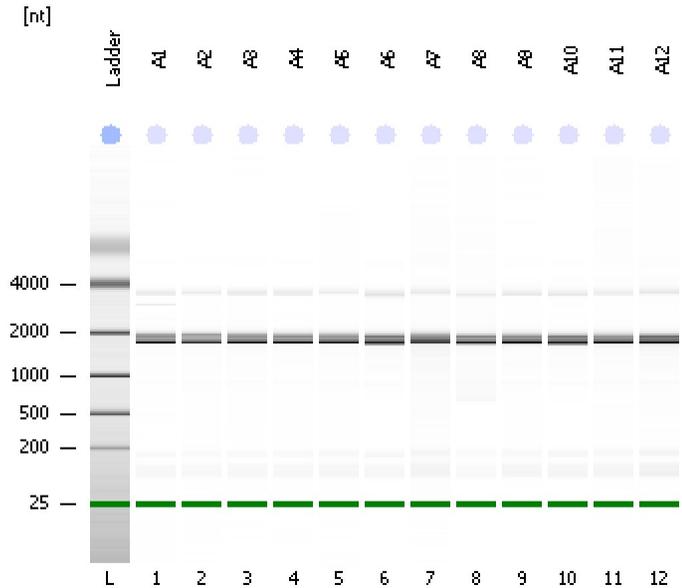


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

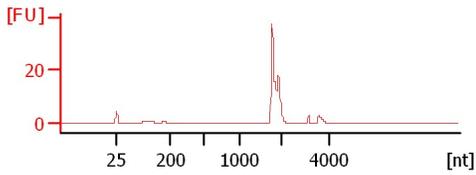
Assay Information:

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.

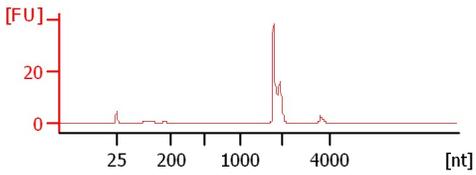
Chip Information:

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

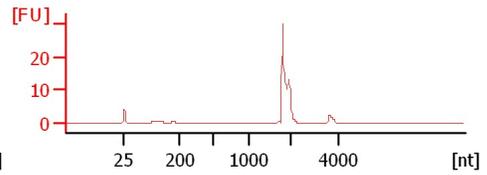
**A1**  
RIN: 8.90



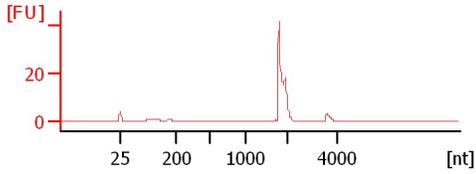
**A2**  
RIN: 8.60



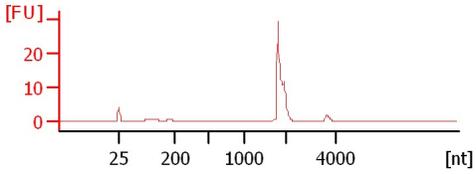
**A3**  
RIN: 8.50



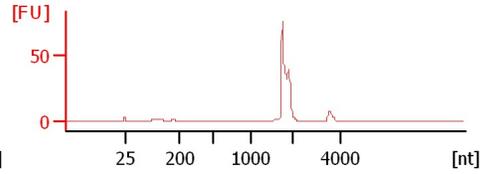
**A4**  
RIN: 8.60



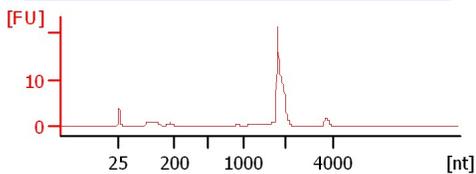
**A5**  
RIN: 9.80



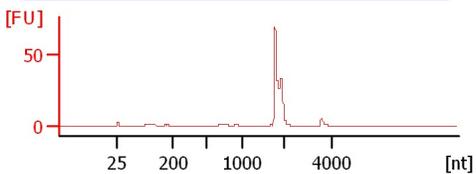
**A6**  
RIN: 8.40



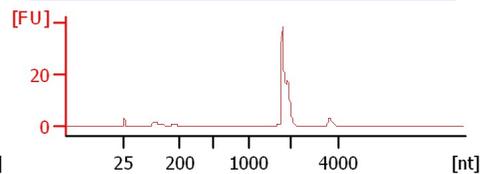
**A7**  
RIN: 9



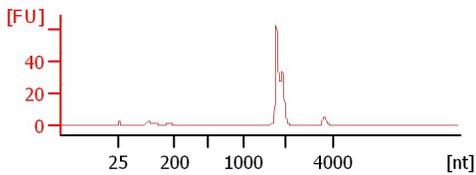
**A8**  
RIN: 9.40



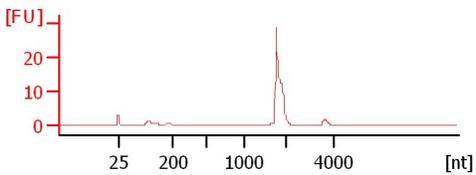
**A9**  
RIN: 9.80



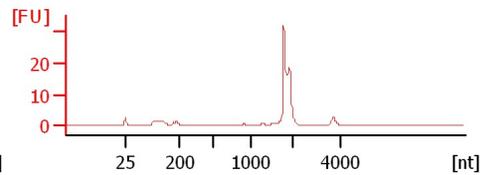
**A10**  
RIN: 8.30



**A11**  
RIN: 9.70



**A12**  
RIN: 9.40



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
A1		✓	RIN: 8.90	
A2		✓	RIN: 8.60	
A3		✓	RIN: 8.50	
A4		✓	RIN: 8.60	
A5		✓	RIN: 9.80	
A6		✓	RIN: 8.40	
A7		✓	RIN:9	
A8		✓	RIN: 9.40	
A9		✓	RIN: 9.80	
A10		✓	RIN: 8.30	
A11		✓	RIN: 9.70	
A12		✓	RIN: 9.40	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 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/ $\mu$ 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

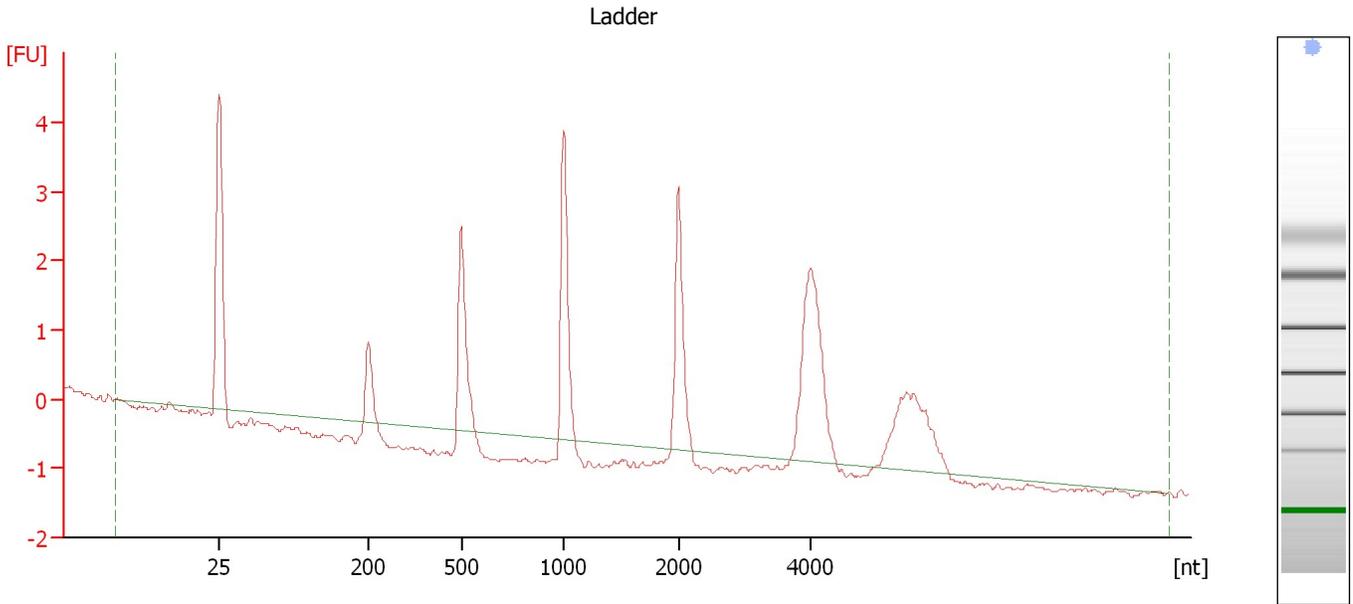
### Ladder

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\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary**



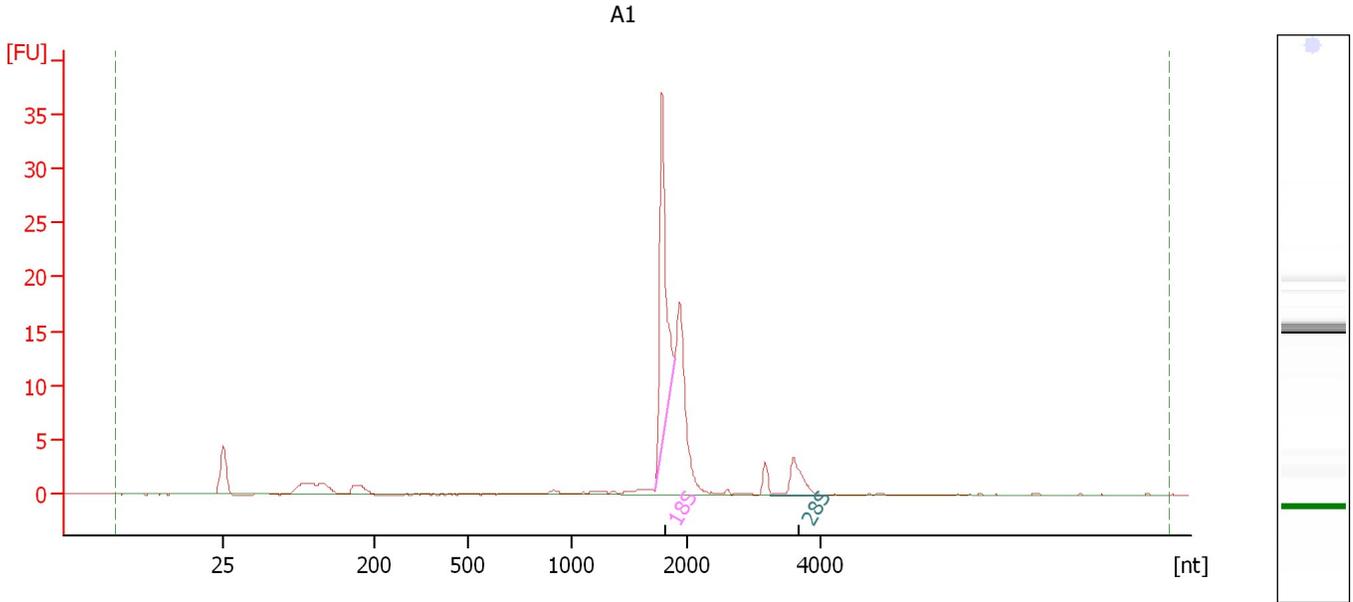
**Overall Results for Ladder**

RNA Area:	21.3	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\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : A1**

RNA Area: 73.9                      RNA Integrity Number (RIN): 8.9 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 521 ng/μl  
rRNA Ratio [28s / 18s]: 0.2  
Result Flagging Color:   
Result Flagging Label: RIN: 8.90

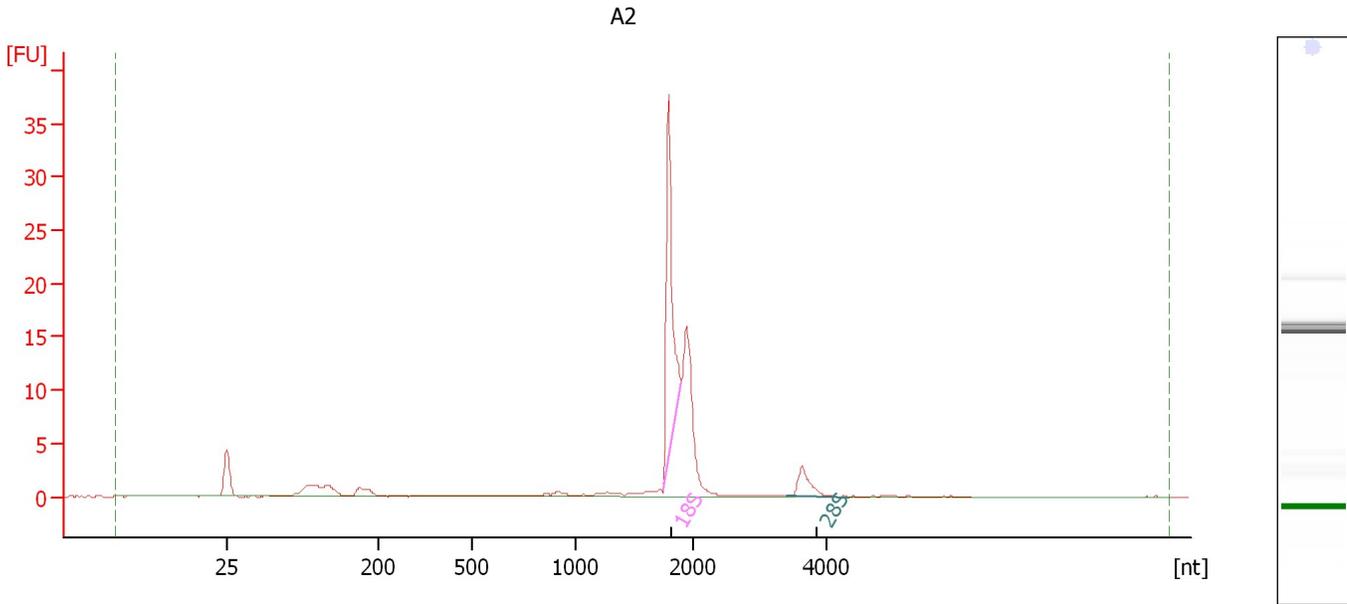
**Fragment table for sample 1 : A1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,737	1,893	24.2	32.7
28S	3,260	4,101	4.7	6.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : A2**

RNA Area:	70.9	RNA Integrity Number (RIN):	8.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	499 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: 8.60

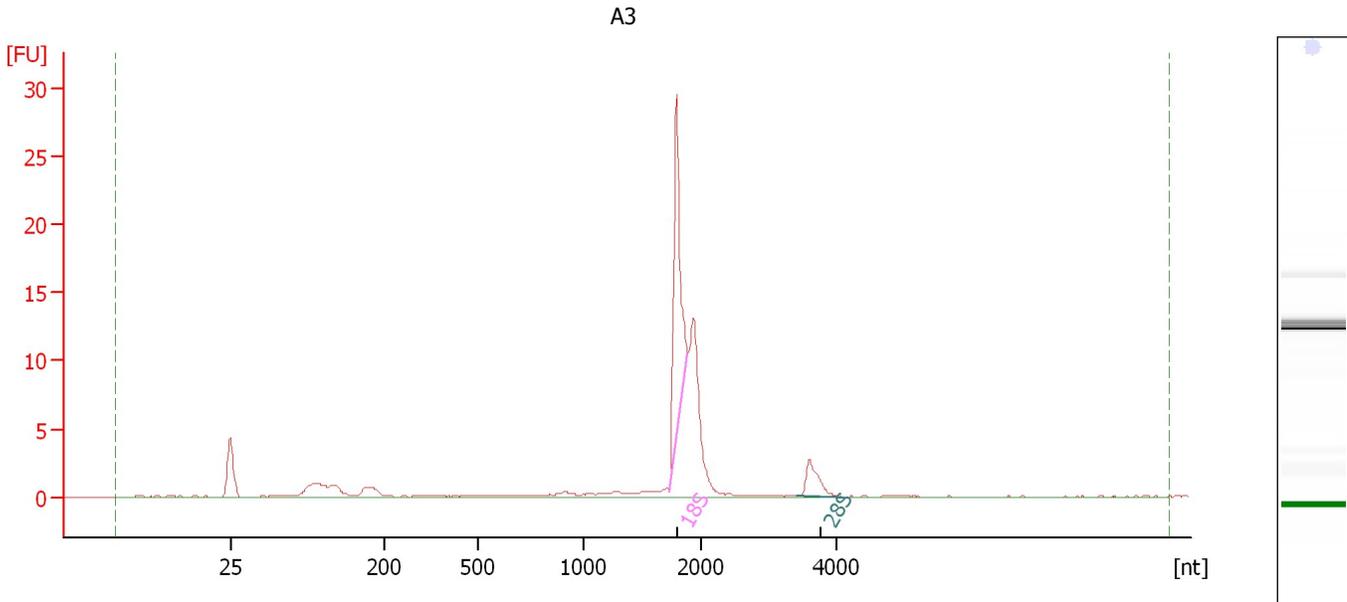
**Fragment table for sample 2 : A2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,751	1,906	23.4	33.1
28S	3,384	4,315	3.5	4.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : A3**

RNA Area:	62.4	RNA Integrity Number (RIN):	8.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	439 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]:	0.2	Result Flagging Label:	RIN: 8.50

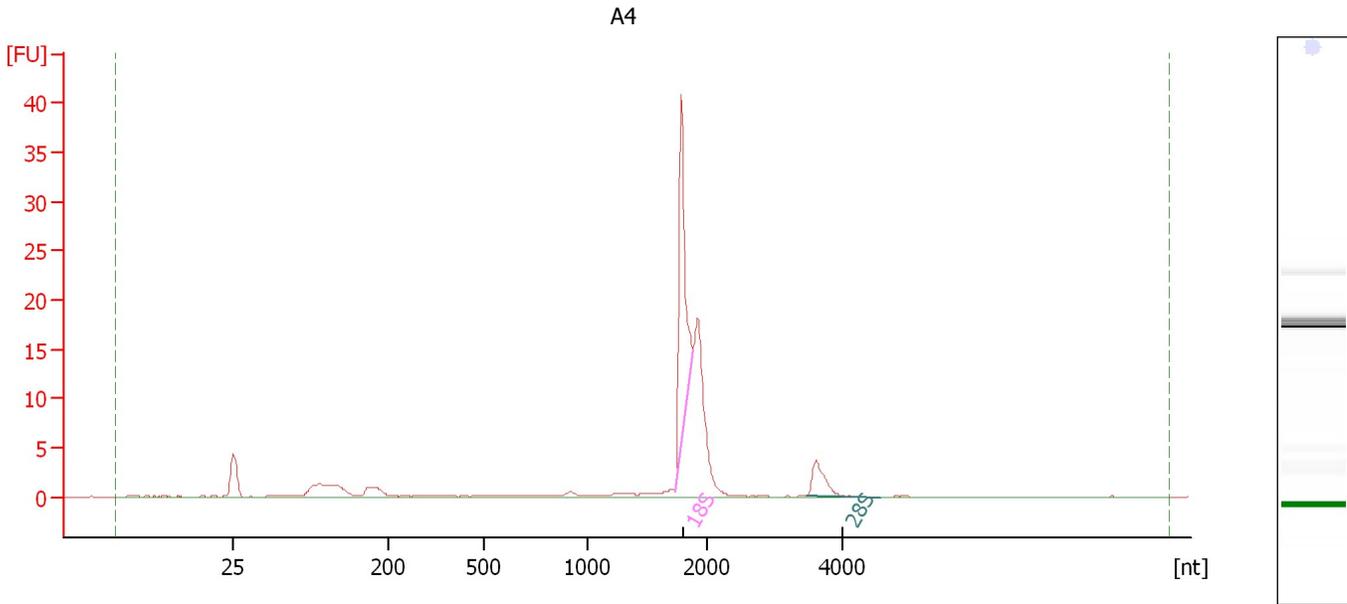
**Fragment table for sample 3 : A3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,739	1,893	18.7	29.9
28S	3,411	4,131	3.4	5.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : A4**

RNA Area:	84.5	RNA Integrity Number (RIN):	8.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	595 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]:	0.2	Result Flagging Label:	RIN: 8.60

**Fragment table for sample 4 : A4**

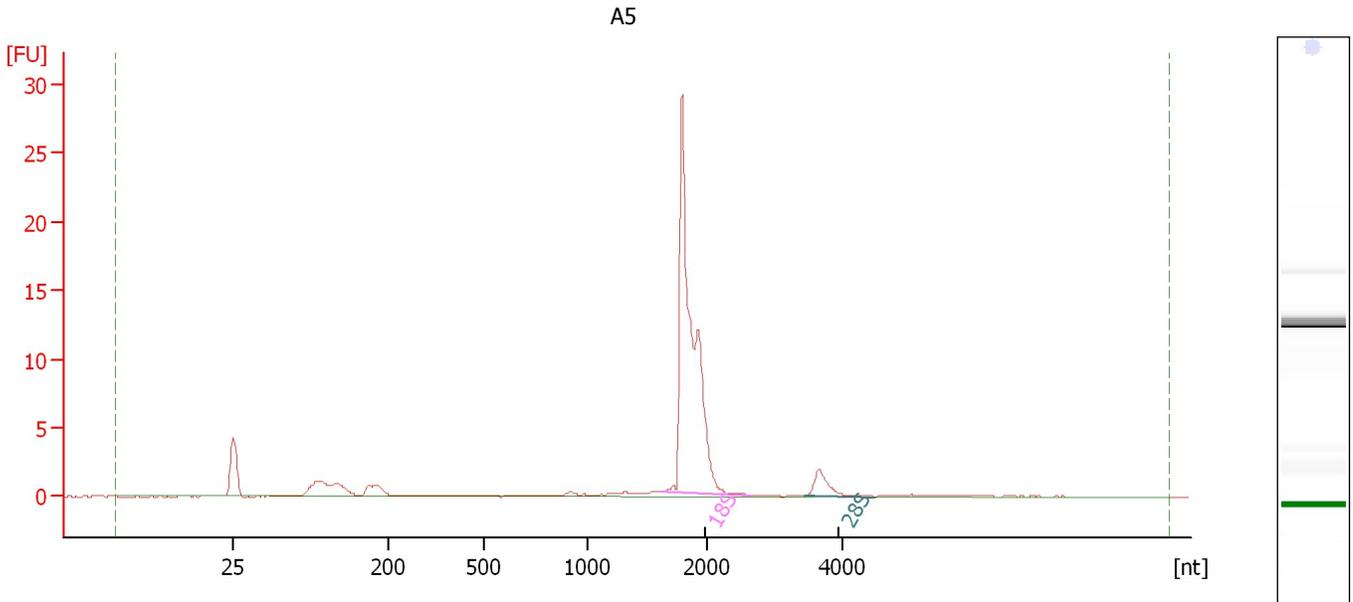
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,735	1,879	24.2	28.6
28S	3,455	4,528	4.7	5.6



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : A5**

RNA Area:	62.4	RNA Integrity Number (RIN):	9.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	439 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: 9.80

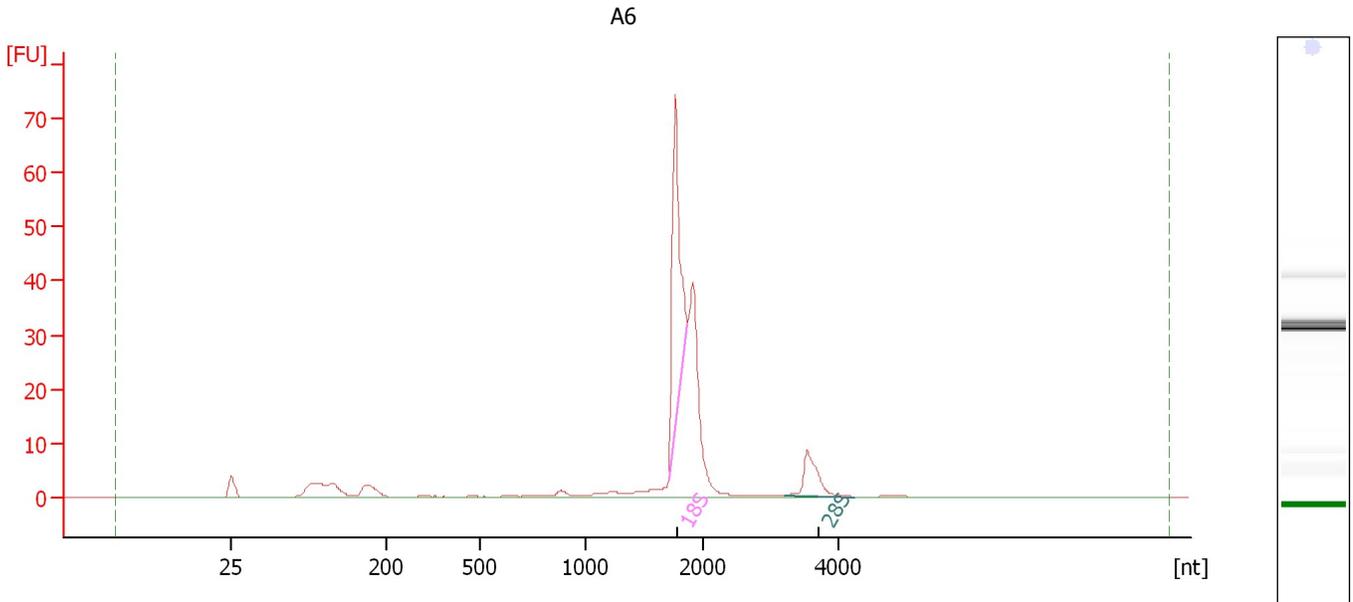
**Fragment table for sample 5 : A5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,618	2,646	42.7	68.5
28S	3,424	4,466	2.9	4.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : A6**

RNA Area: 188.3                      RNA Integrity Number (RIN): 8.4 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 1,326 ng/μl  
rRNA Ratio [28s / 18s]: 0.2  
Result Flagging Color:   
Result Flagging Label: RIN: 8.40

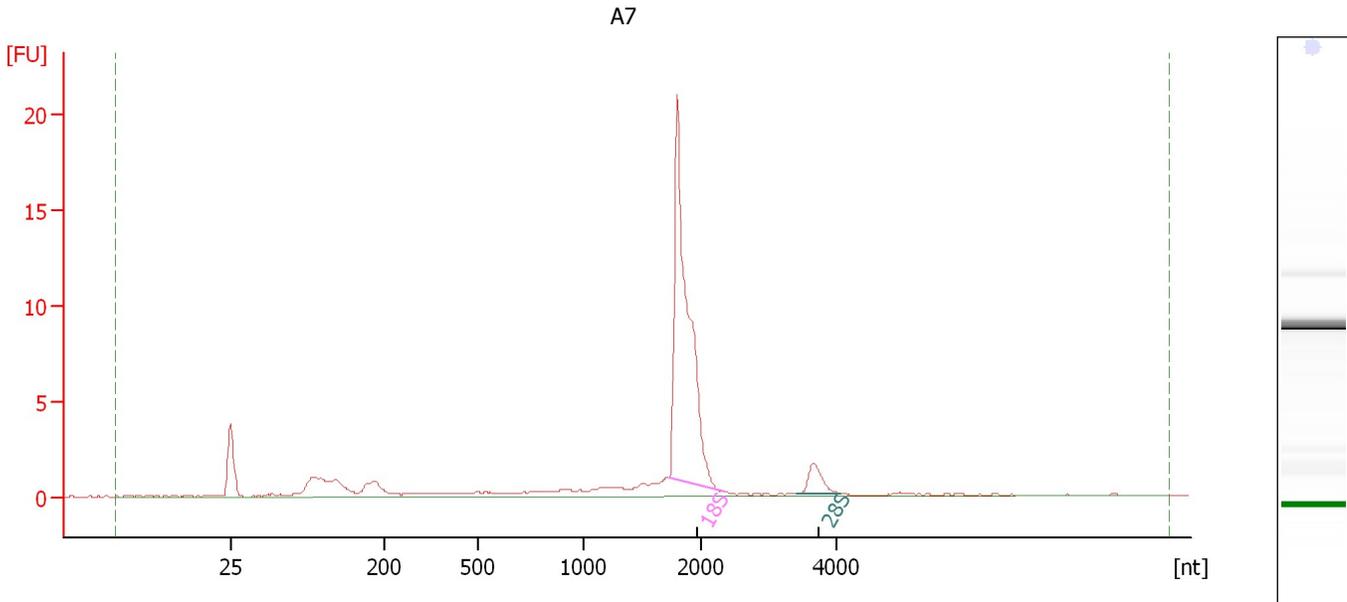
**Fragment table for sample 6 : A6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,714	1,876	50.4	26.8
28S	3,207	4,238	11.8	6.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : A7**

RNA Area:	56.5	RNA Integrity Number (RIN):	9 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	398 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:9

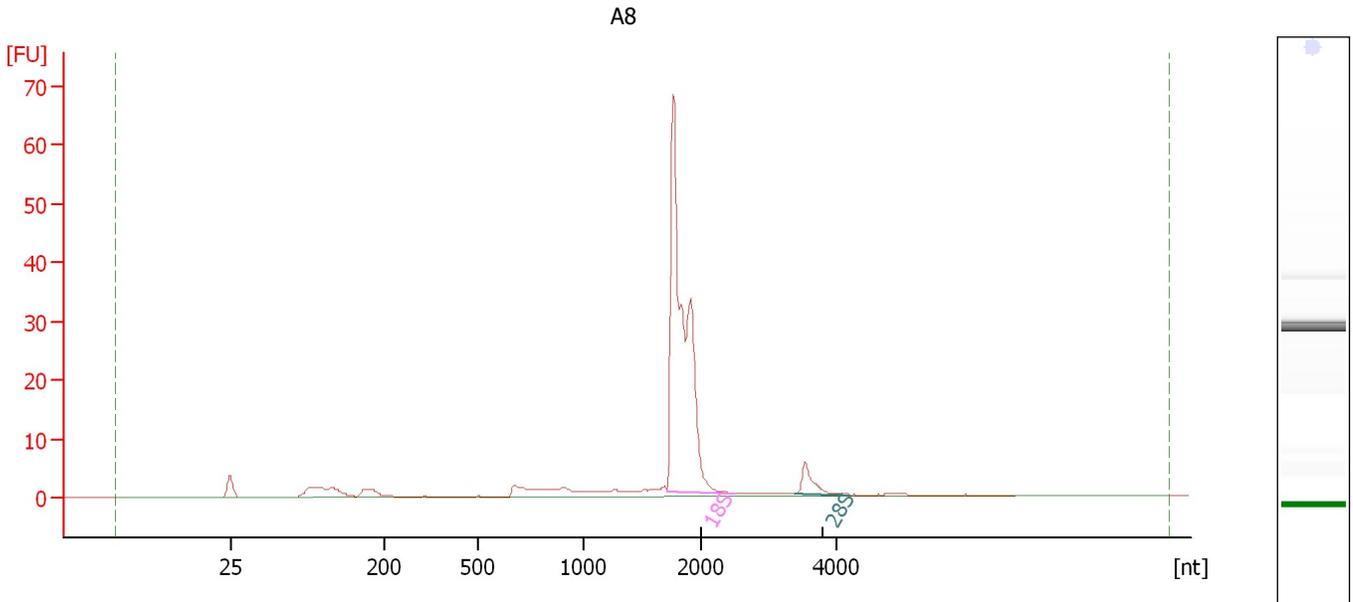
**Fragment table for sample 7 : A7**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,739	2,348	31.4	55.6
28S	3,411	4,053	2.3	4.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
 Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : A8**

RNA Area:	151.1	RNA Integrity Number (RIN):	9.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,064 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: 9.40

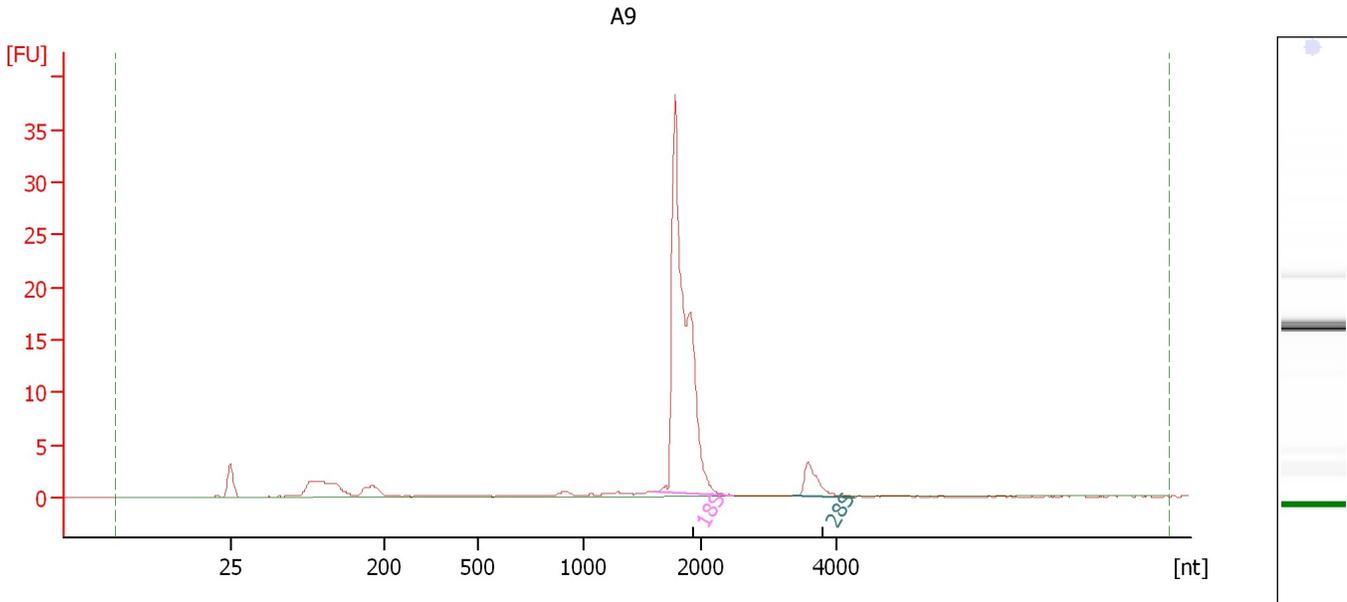
**Fragment table for sample 8 : A8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,721	2,520	102.0	67.5
28S	3,396	4,209	5.8	3.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : A9**

RNA Area:	85.9	RNA Integrity Number (RIN):	9.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	605 ng/μl	Result Flagging Color:	<span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px; background-color: #ccccff;"></span>
rRNA Ratio [28s / 18s]:	0.1	Result Flagging Label:	RIN: 9.80

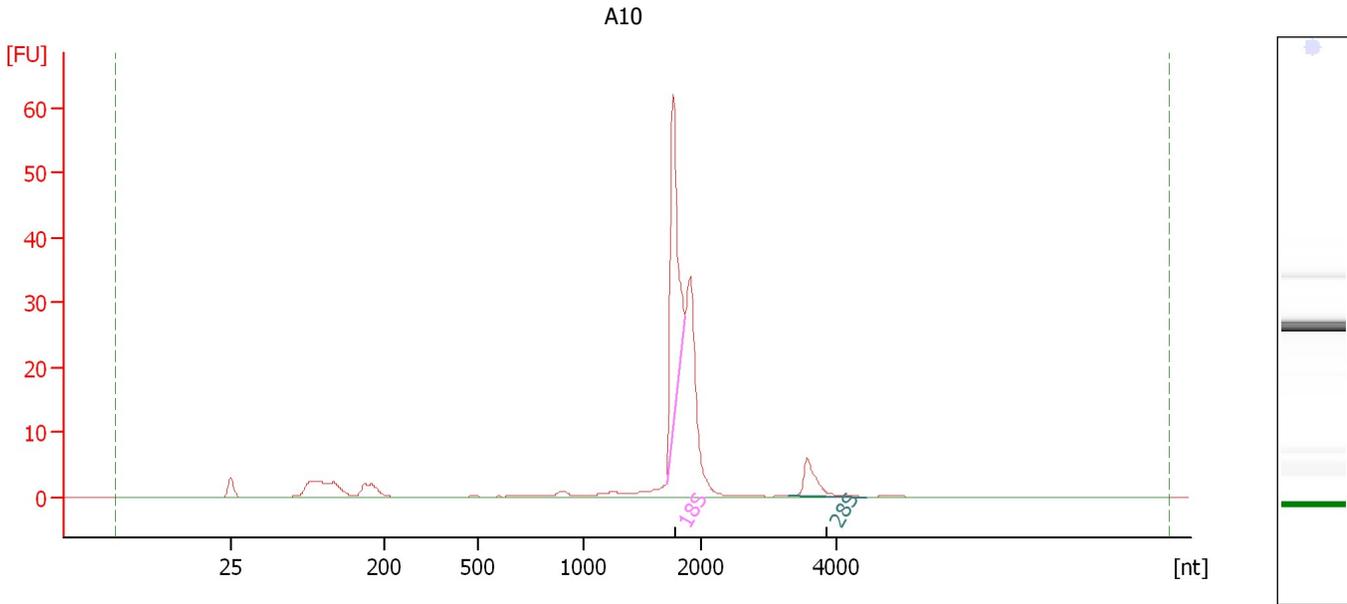
**Fragment table for sample 9 : A9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,603	2,473	59.8	69.6
28S	3,349	4,256	4.6	5.3

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
 Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : A10**

RNA Area:	156.7	RNA Integrity Number (RIN):	8.3 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,103 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]:	0.2	Result Flagging Label:	RIN: 8.30

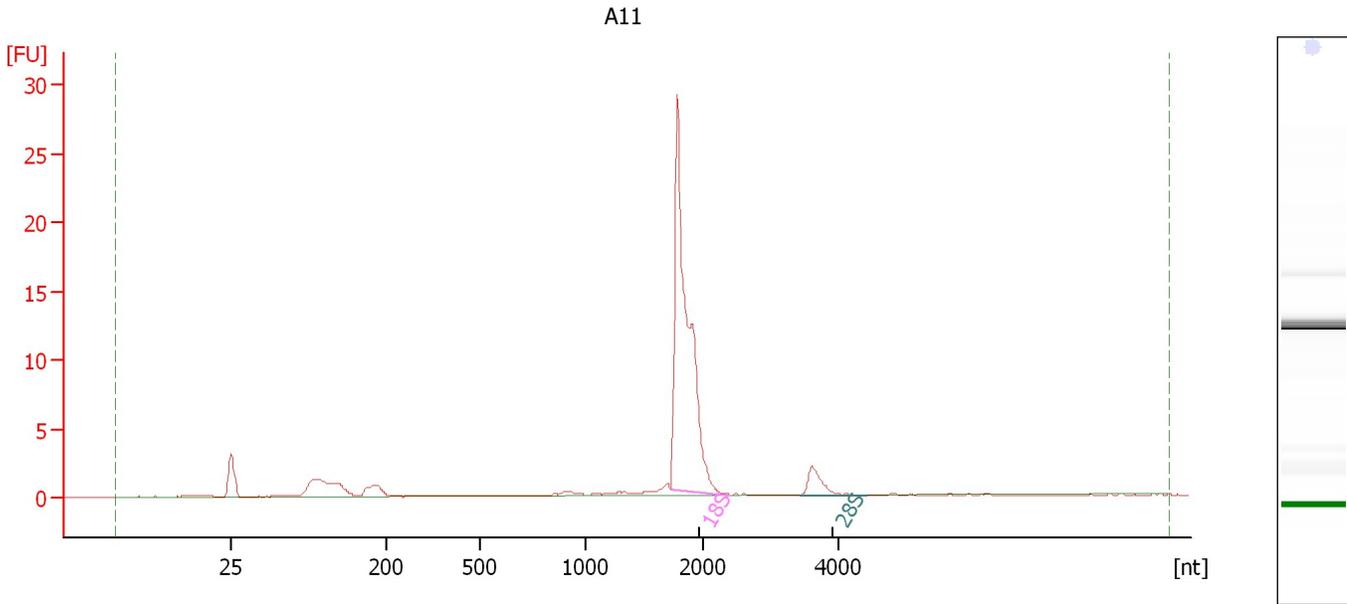
**Fragment table for sample 10 : A10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,712	1,866	38.9	24.8
28S	3,302	4,444	7.6	4.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : A11**

RNA Area:	63.0	RNA Integrity Number (RIN):	9.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	443 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: 9.70

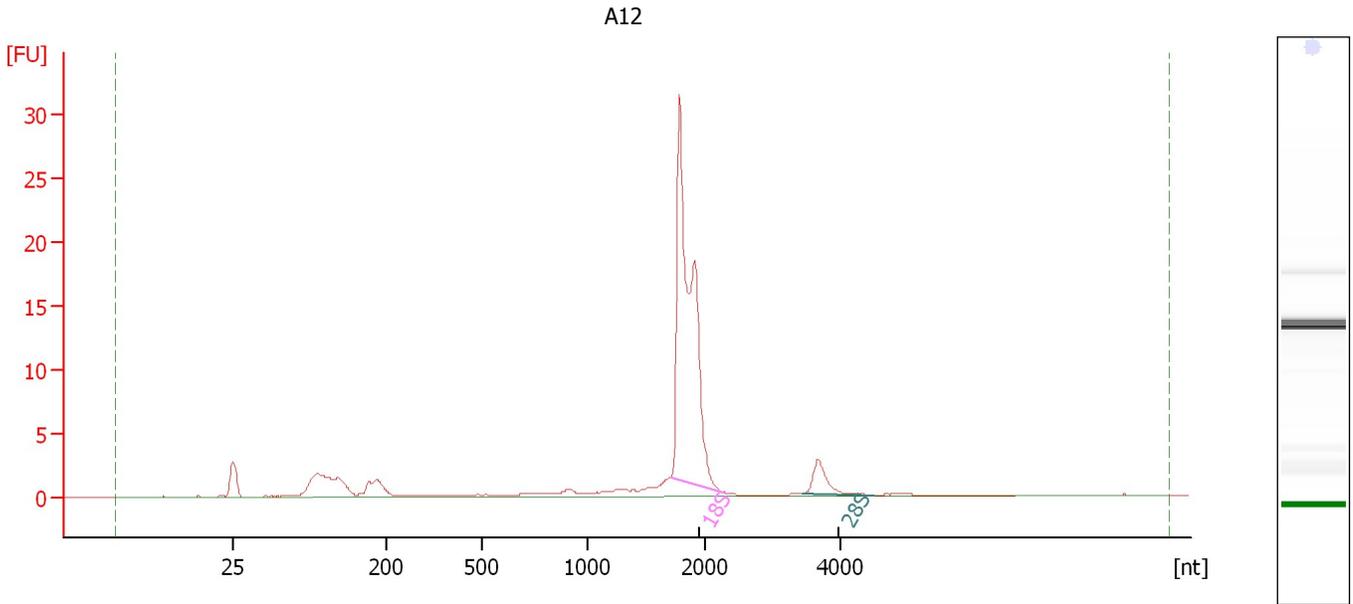
**Fragment table for sample 11 : A11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,732	2,395	42.8	68.0
28S	3,426	4,410	2.9	4.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : A12**

RNA Area:	84.6	RNA Integrity Number (RIN):	9.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	596 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: 9.40

**Fragment table for sample 12 : A12**

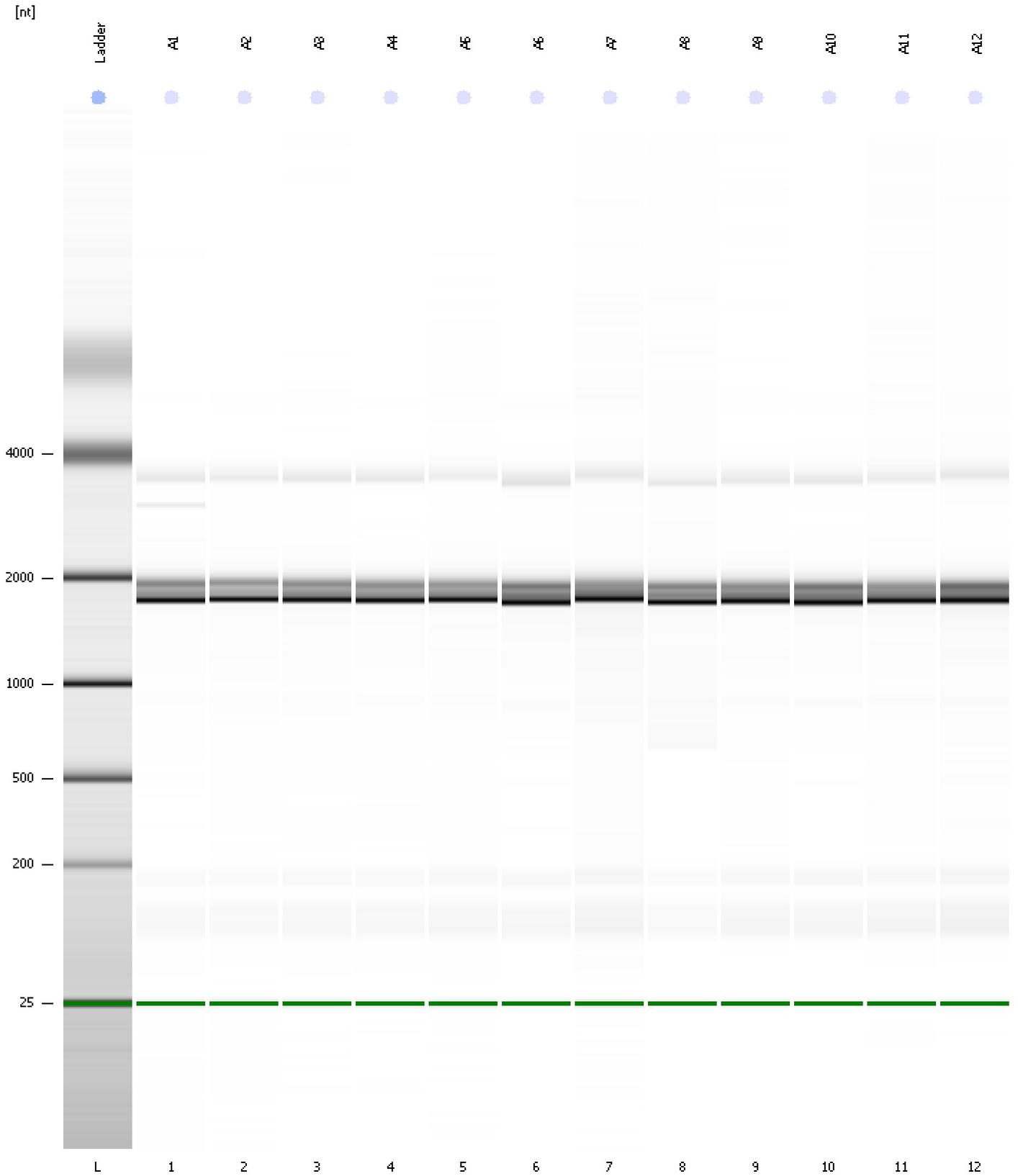
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,724	2,334	50.7	59.9
28S	3,441	4,500	3.8	4.4



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad

Created: 3/3/2015 9:17:41 AM  
Modified: 3/3/2015 9:55:16 AM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano Created: 3/3/2015 9:17:41 AM  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-03\2015-03-03\_002.xad Modified: 3/3/2015 9:55:16 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		3/3/2015 9:40:41 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-03\2015-03-03_002.xad)		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/3/2015 9:17:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1