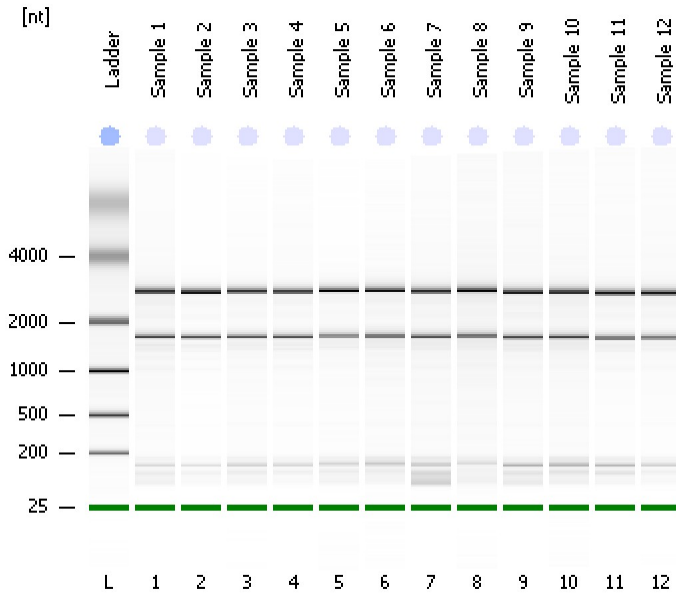


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

### Electrophoresis File Run Summary



#### Instrument Information:

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

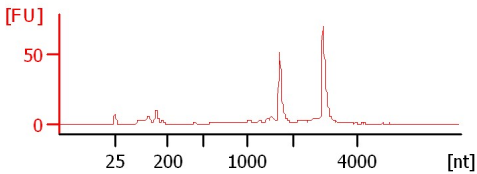
#### Assay Information:

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.

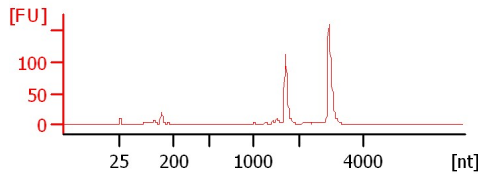
#### Chip Information:

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

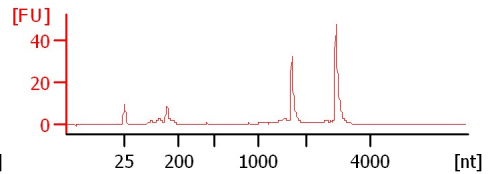
**Sample 1**  
RIN: 8.40



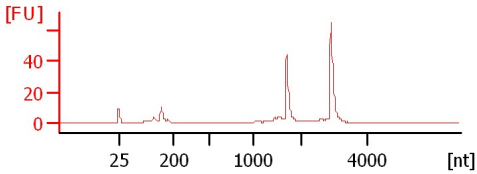
**Sample 2**  
RIN: 9.60



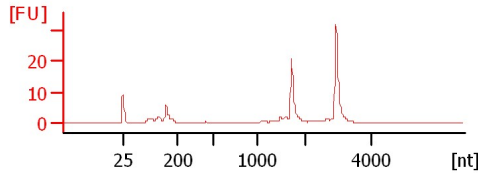
**Sample 3**  
RIN: 8.70



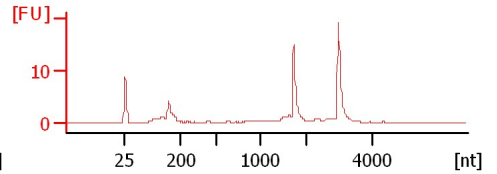
**Sample 4**  
RIN: 9



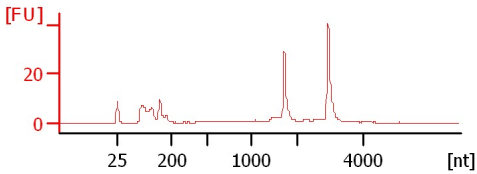
**Sample 5**  
RIN: 8.90



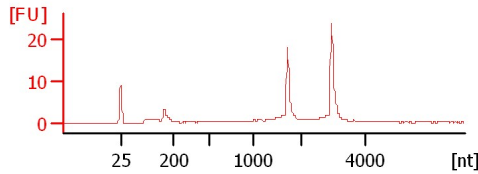
**Sample 6**  
RIN: 8.90



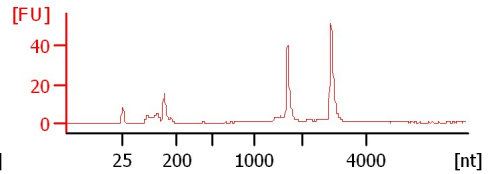
**Sample 7**  
RIN: 8.20



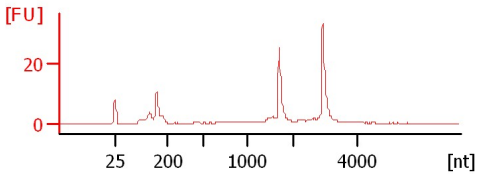
**Sample 8**  
RIN: 8.90



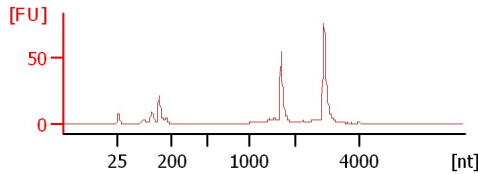
**Sample 9**  
RIN: 8.60



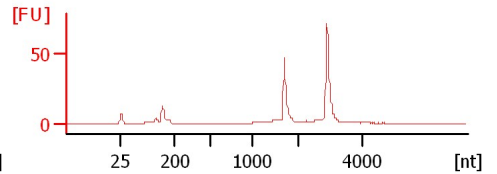
**Sample 10**  
RIN: 8.60



**Sample 11**  
RIN: 9.10



**Sample 12**  
RIN: 9



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 8.40	
Sample 2		✓	RIN: 9.60	
Sample 3		✓	RIN: 8.70	
Sample 4		✓	RIN:9	
Sample 5		✓	RIN: 8.90	
Sample 6		✓	RIN: 8.90	
Sample 7		✓	RIN: 8.20	
Sample 8		✓	RIN: 8.90	
Sample 9		✓	RIN: 8.60	
Sample 10		✓	RIN: 8.60	
Sample 11		✓	RIN: 9.10	
Sample 12		✓	RIN:9	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 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/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

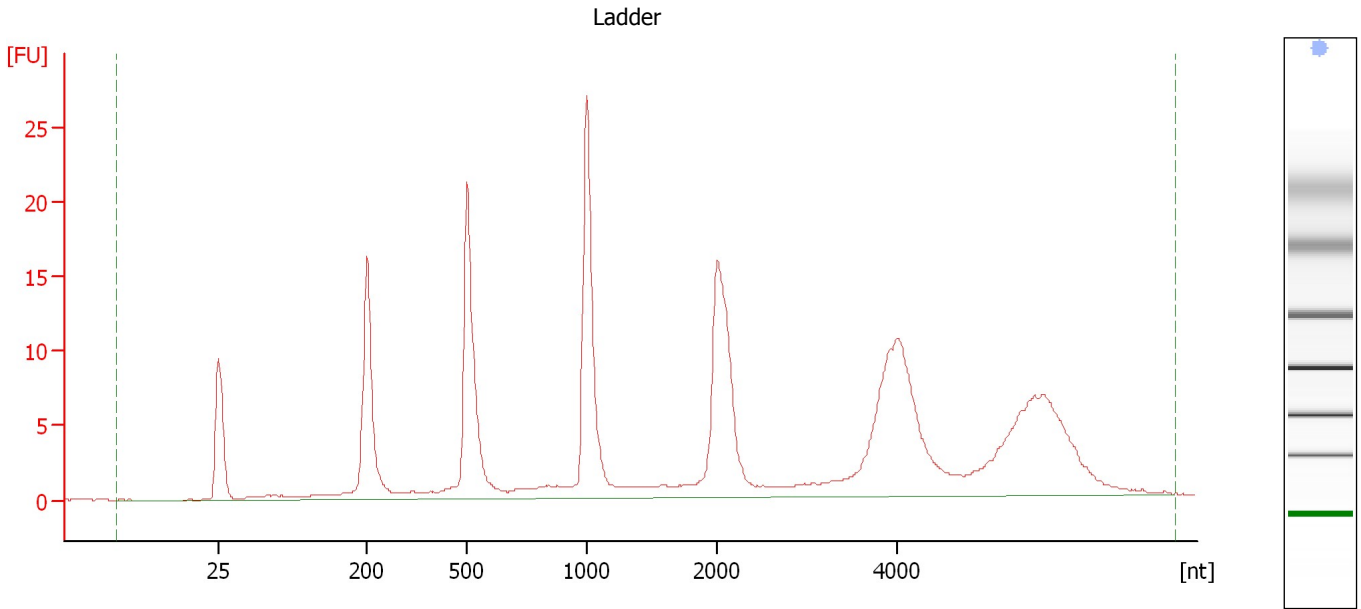
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary**



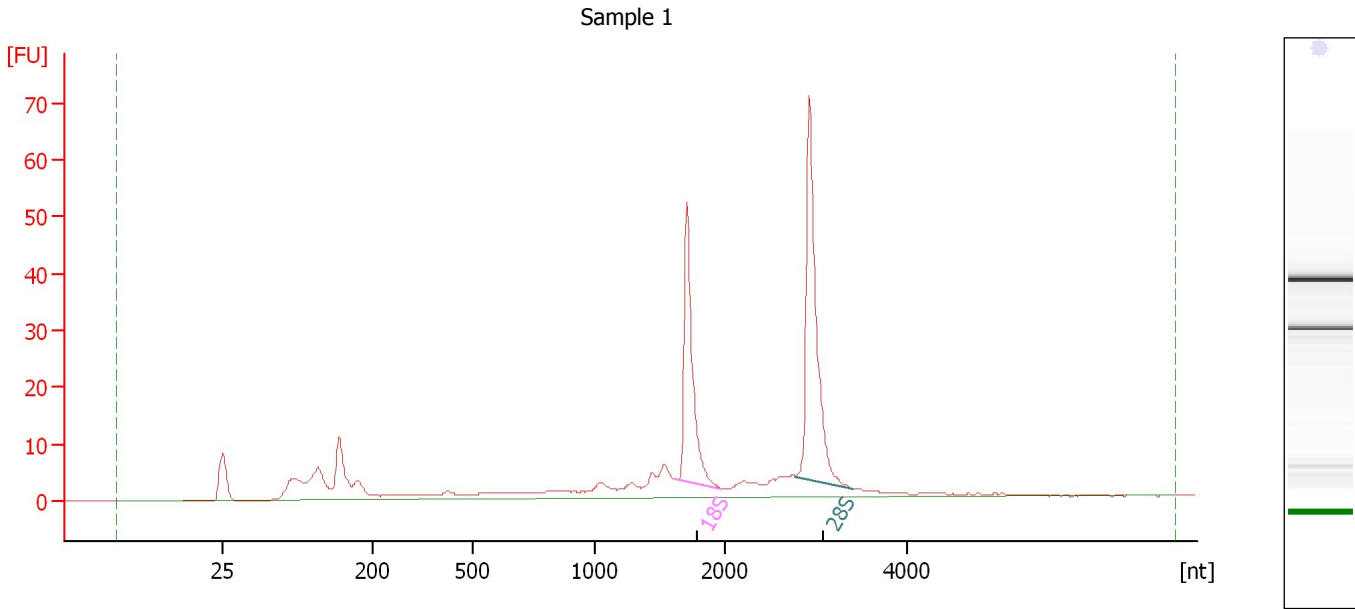
**Overall Results for Ladder**

RNA Area:	234.0	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/ $\mu$ l	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	269.5	RNA Integrity Number (RIN):	8.4 (B.02.08)
RNA Concentration:	173 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]:	1.5	Result Flagging Label:	RIN: 8.40

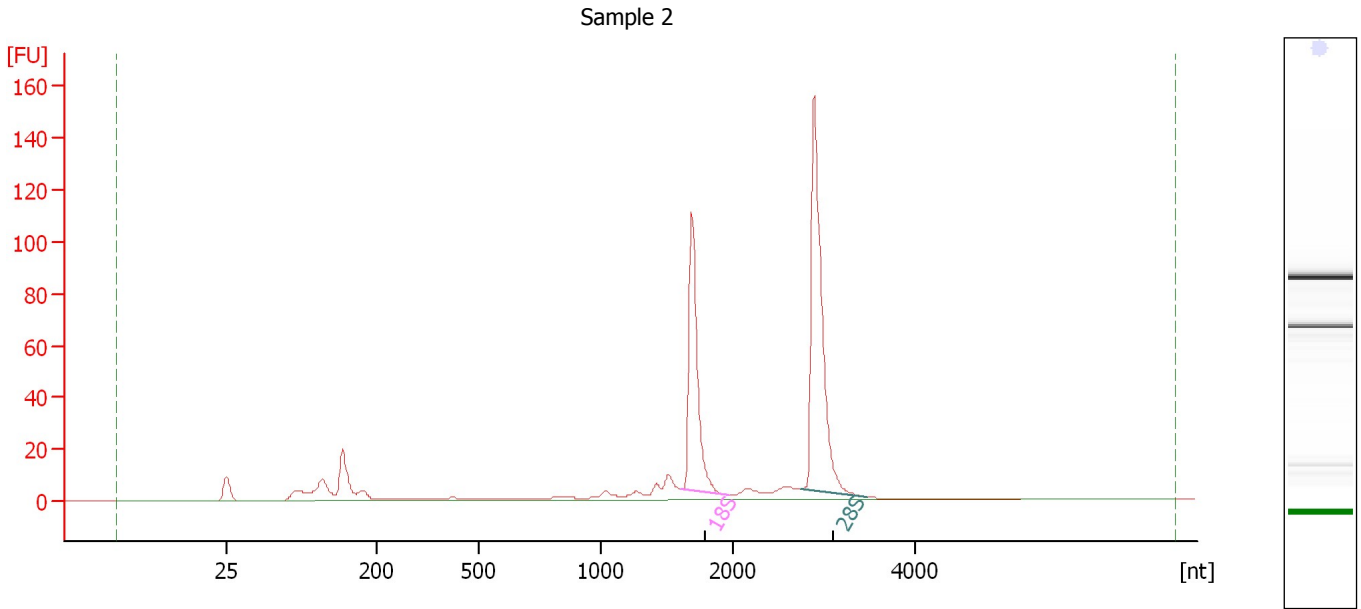
**Fragment table for sample 1 : Sample 1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,619	1,968	47.7	17.7
28S	2,769	3,395	70.0	26.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	447.6	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	287 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]:	1.6	Result Flagging Label:	RIN: 9.60

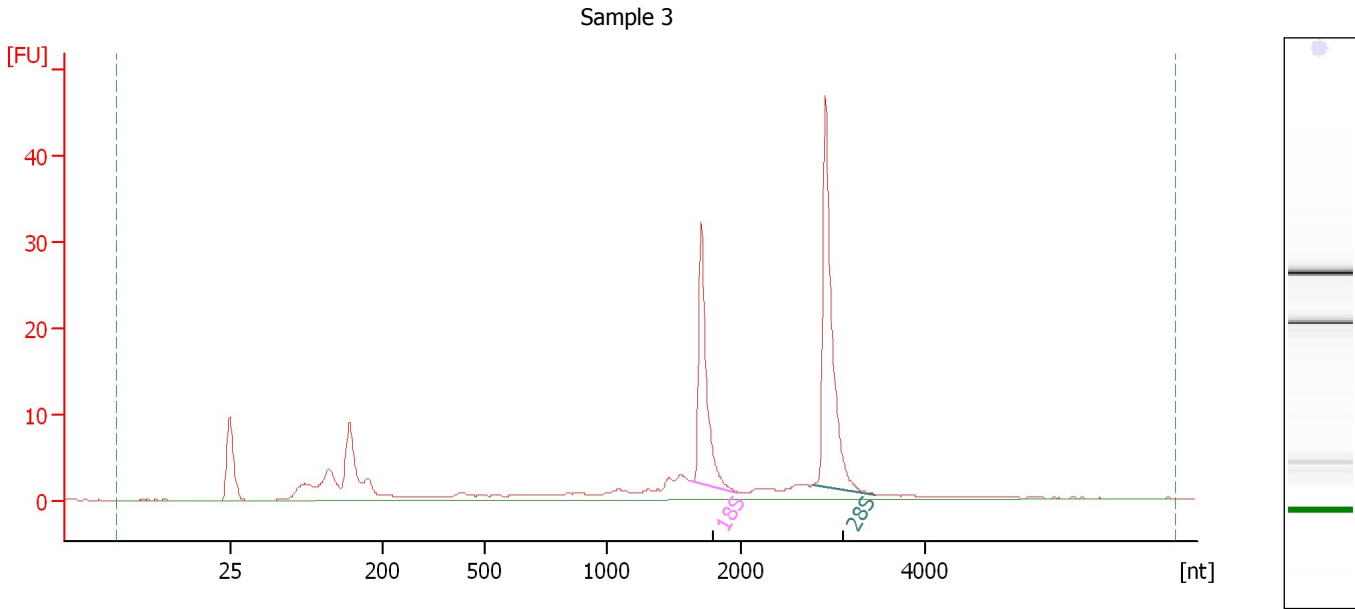
**Fragment table for sample 2 : Sample 2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,606	1,977	101.5	22.7
28S	2,754	3,469	162.9	36.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	161.6	RNA Integrity Number (RIN):	8.7 (B.02.08)
RNA Concentration:	104 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]:	1.5	Result Flagging Label:	RIN: 8.70

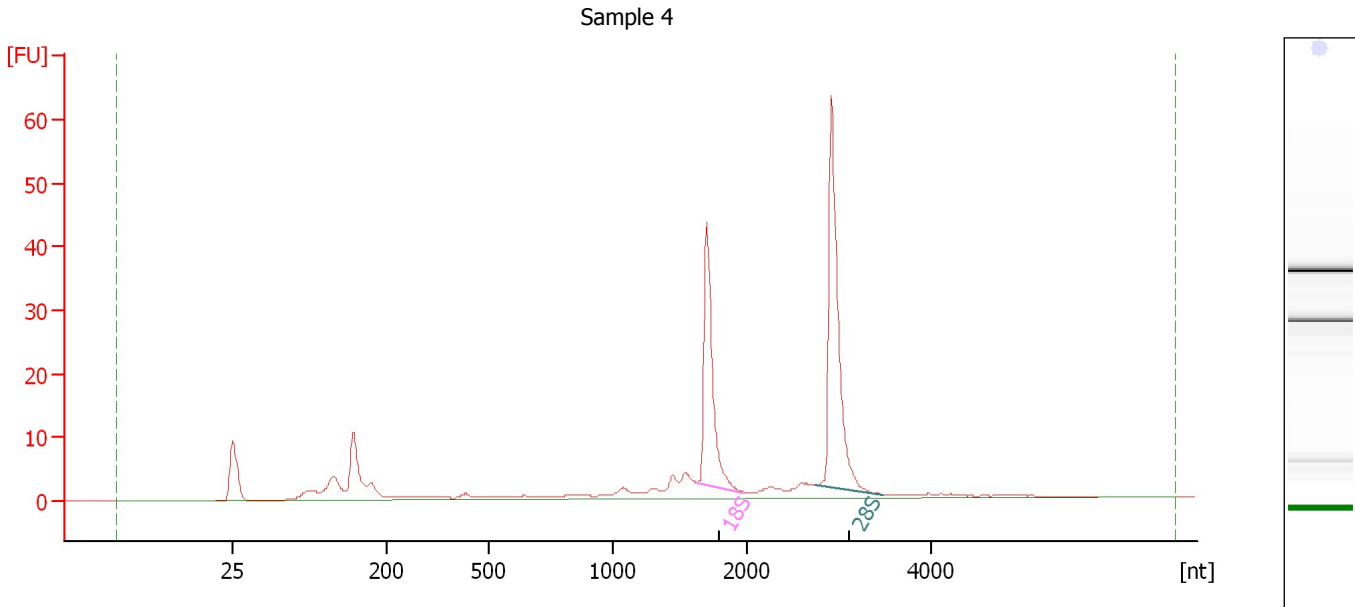
**Fragment table for sample 3 : Sample 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,626	1,971	27.9	17.2
28S	2,796	3,459	42.8	26.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area: 192.5                      RNA Integrity Number (RIN): 9 (B.02.08)  
RNA Concentration: 123 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5                      Result Flagging Label: RIN:9

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

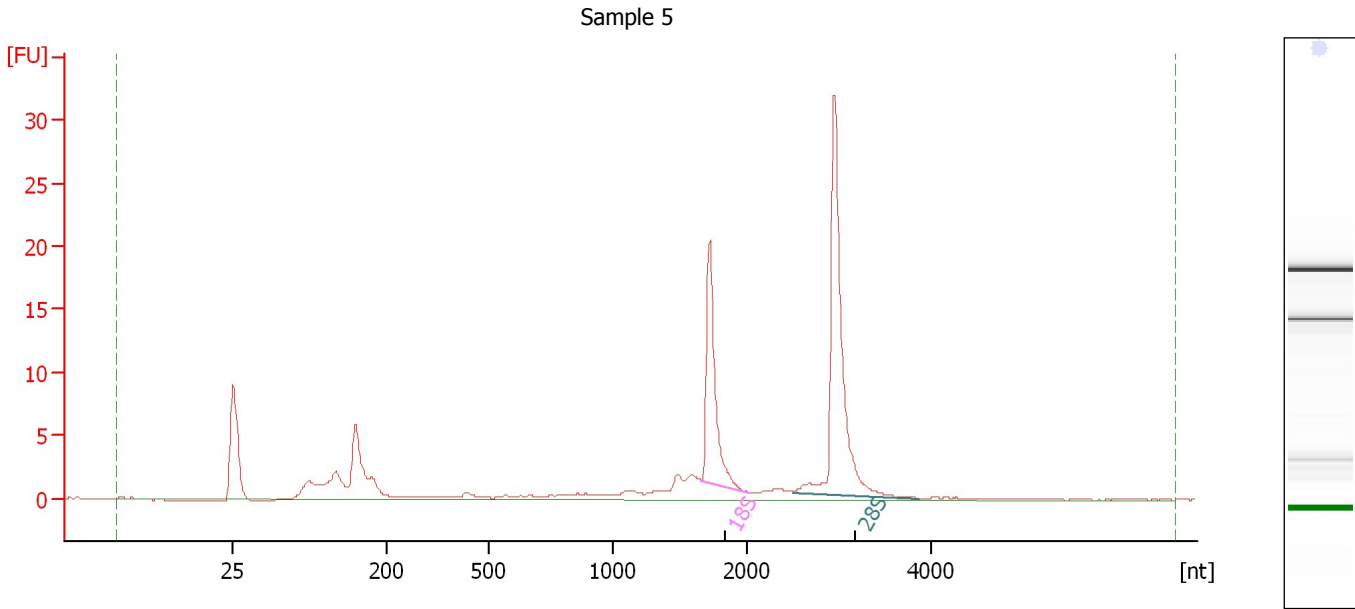
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,621	1,972	38.0	19.8
28S	2,746	3,463	56.9	29.6



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	100.8	RNA Integrity Number (RIN):	8.9 (B.02.08)
RNA Concentration:	65 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]:	1.9	Result Flagging Label:	RIN: 8.90

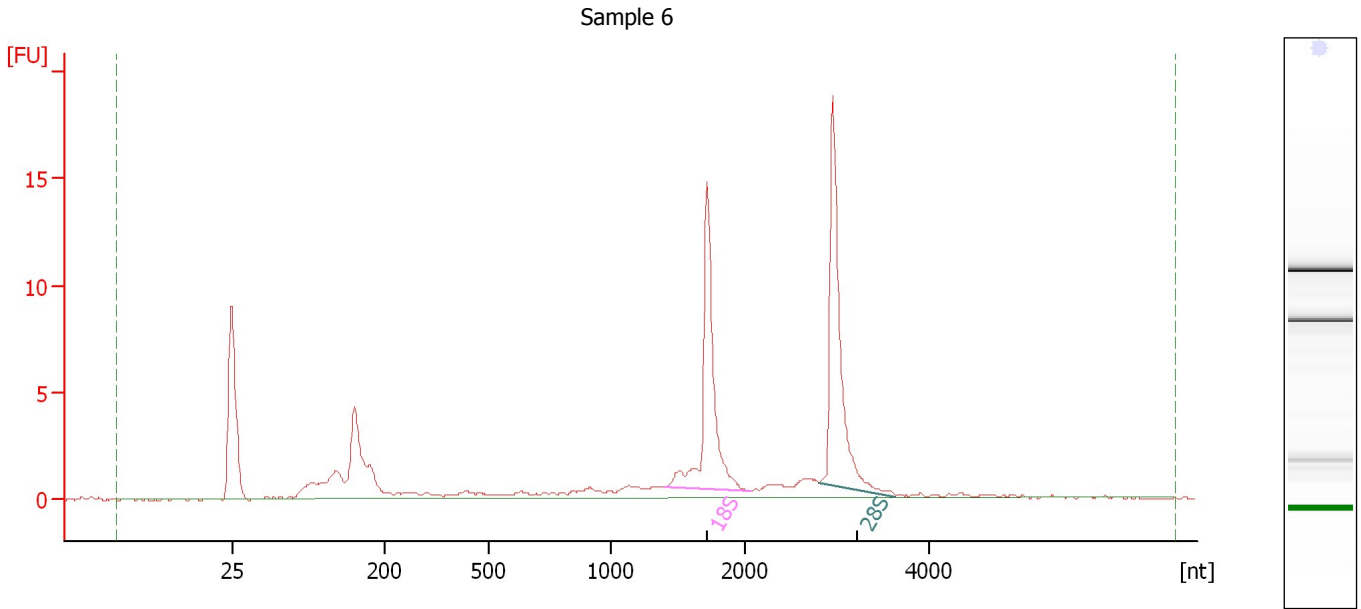
**Fragment table for sample 5 : Sample 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,661	2,017	17.9	17.7
28S	2,503	3,857	33.3	33.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area: 74.0                      RNA Integrity Number (RIN): 8.9 (B.02.08)  
RNA Concentration: 47 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.0              Result Flagging Label: RIN: 8.90

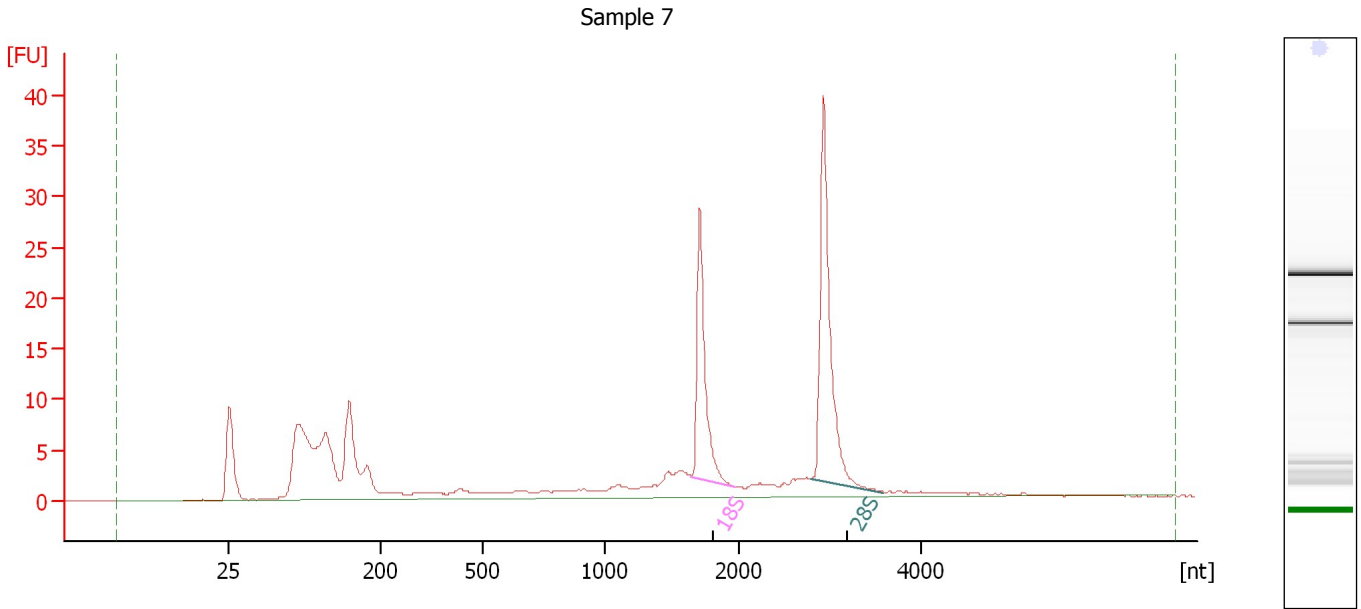
**Fragment table for sample 6 : Sample 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,405	2,063	16.7	22.6
28S	2,805	3,640	17.5	23.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	191.8	RNA Integrity Number (RIN):	8.2 (B.02.08)
RNA Concentration:	123 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]:	1.5	Result Flagging Label:	RIN: 8.20

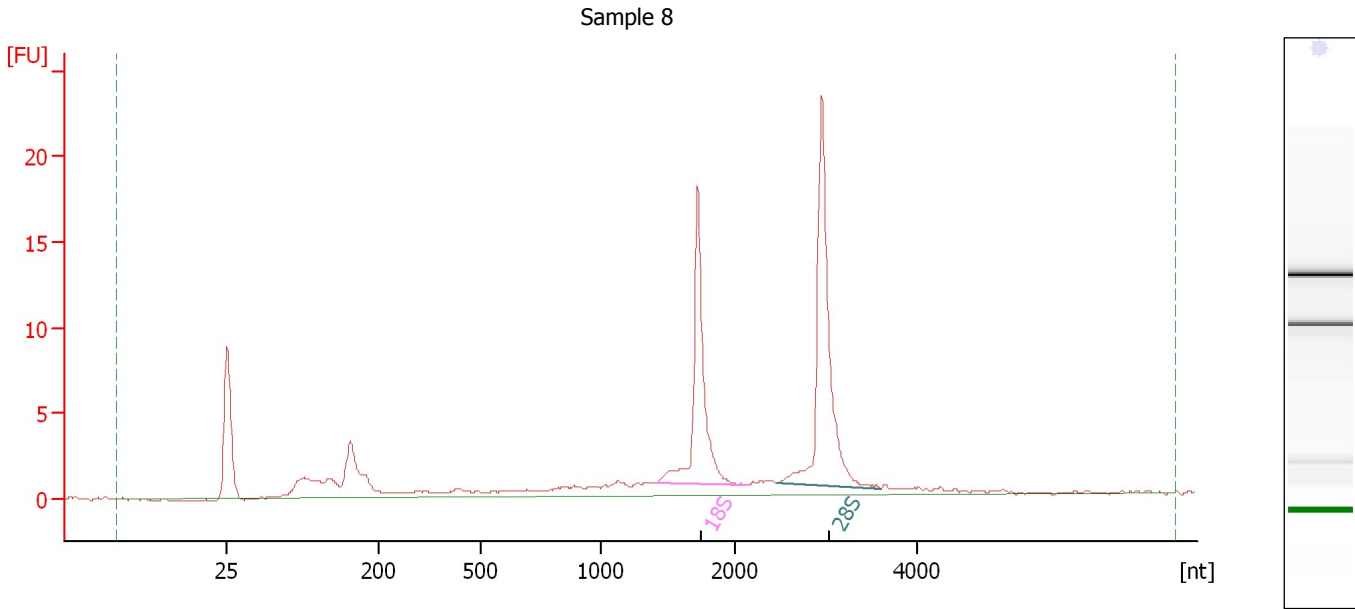
**Fragment table for sample 7 : Sample 7**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,649	1,970	25.2	13.1
28S	2,785	3,579	37.8	19.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	94.9	RNA Integrity Number (RIN):	8.9 (B.02.08)
RNA Concentration:	61 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]:	1.3	Result Flagging Label:	RIN: 8.90

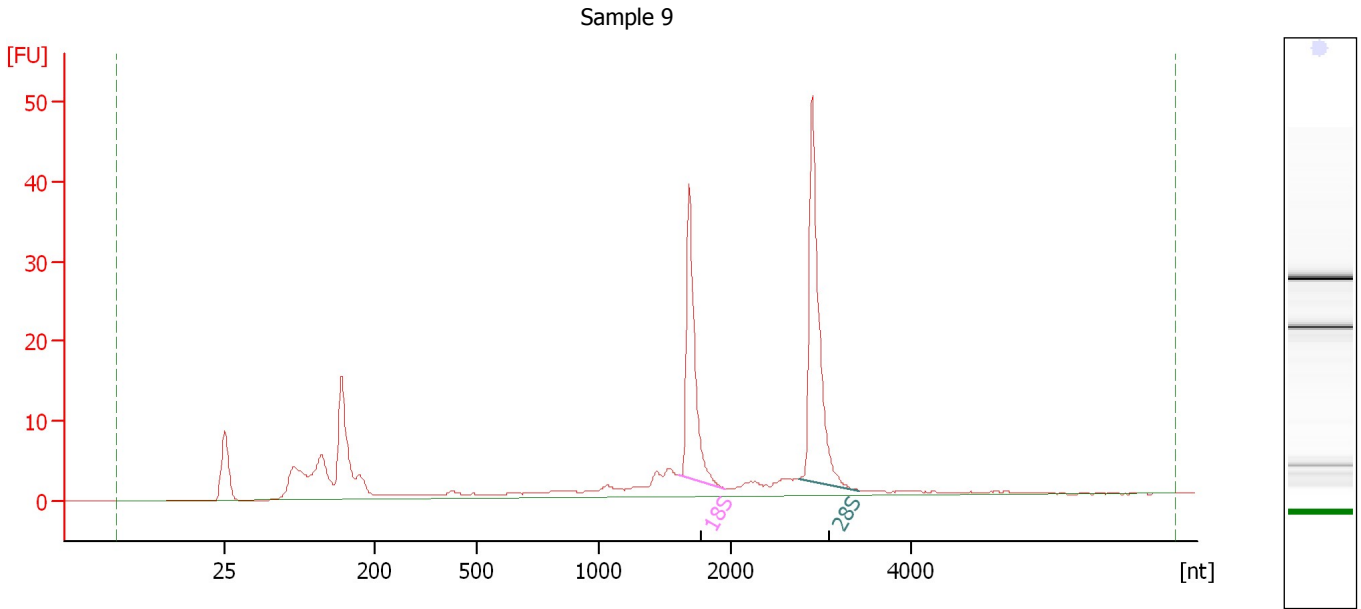
**Fragment table for sample 8 : Sample 8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,413	2,144	20.0	21.1
28S	2,460	3,607	27.0	28.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	201.7	RNA Integrity Number (RIN):	8.6 (B.02.08)
RNA Concentration:	129 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]:	1.4	Result Flagging Label:	RIN: 8.60

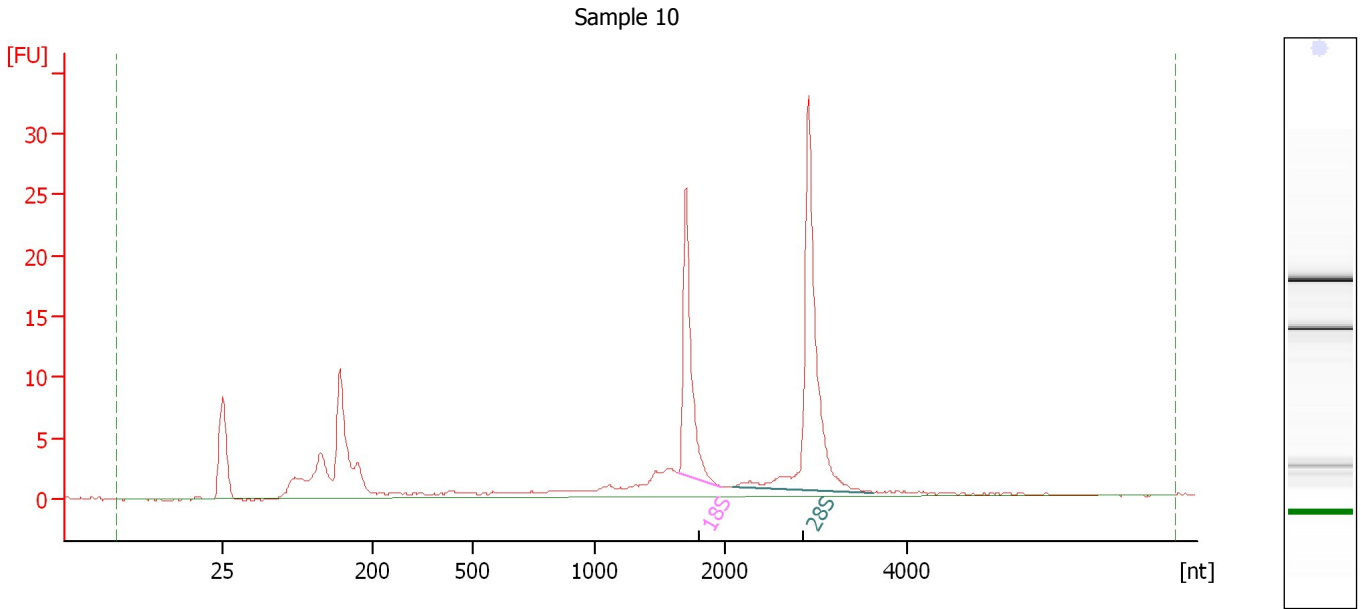
**Fragment table for sample 9 : Sample 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,613	1,961	34.6	17.2
28S	2,755	3,413	48.4	24.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	139.9	RNA Integrity Number (RIN):	8.6 (B.02.08)
RNA Concentration:	90 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]:	1.8	Result Flagging Label:	RIN: 8.60

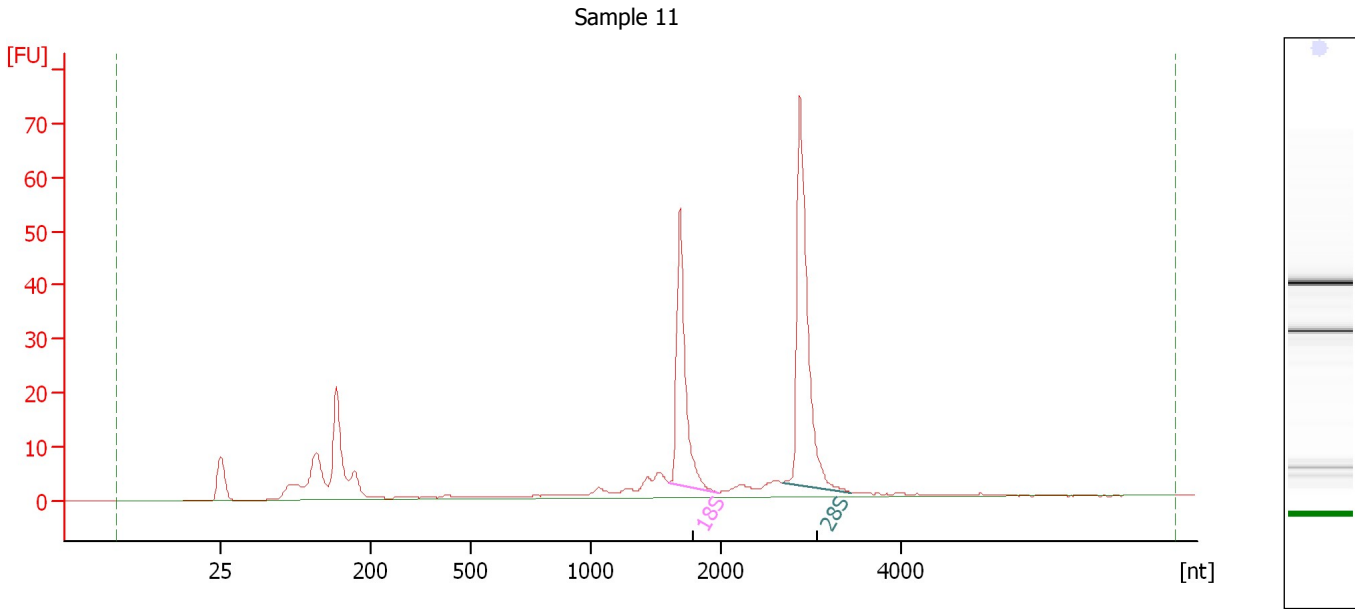
**Fragment table for sample 10 : Sample 10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,635	1,960	22.3	16.0
28S	2,072	3,631	39.5	28.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
 Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	260.7	RNA Integrity Number (RIN):	9.1 (B.02.08)
RNA Concentration:	167 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]:	1.5	Result Flagging Label:	RIN: 9.10

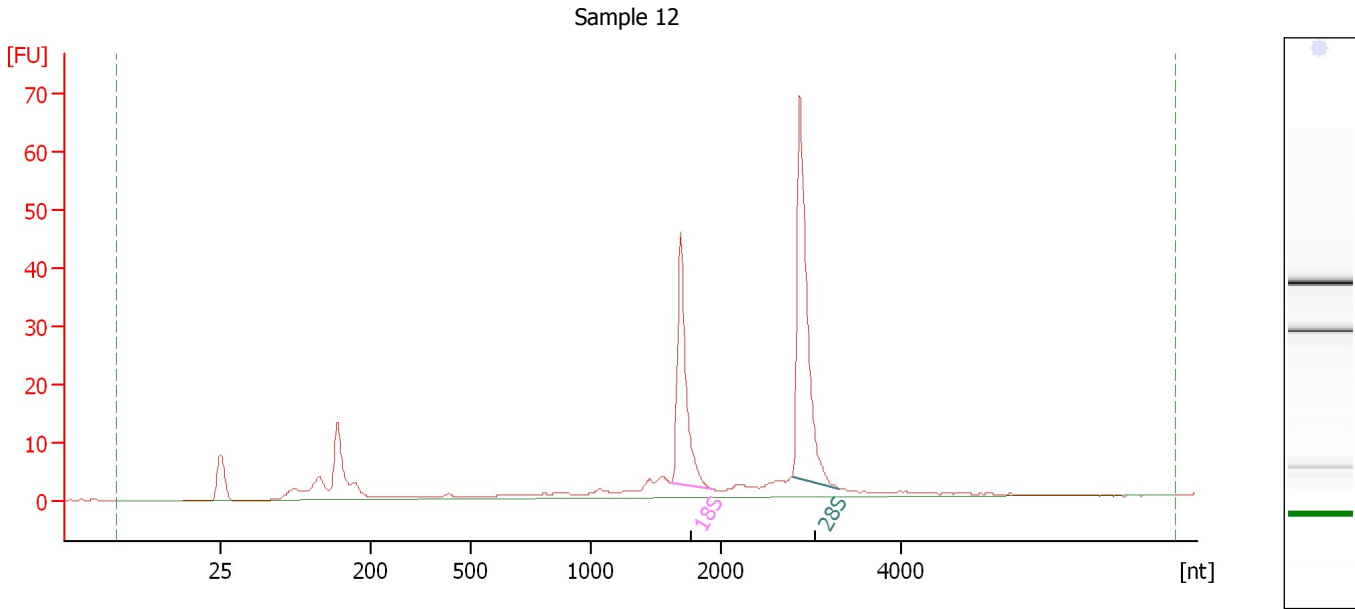
**Fragment table for sample 11 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,600	1,976	49.9	19.2
28S	2,676	3,435	76.9	29.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Electropherogram Summary Continued ...**



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

RNA Area: 213.7 RNA Integrity Number (RIN): 9 (B.02.08)  
RNA Concentration: 137 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN:9

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

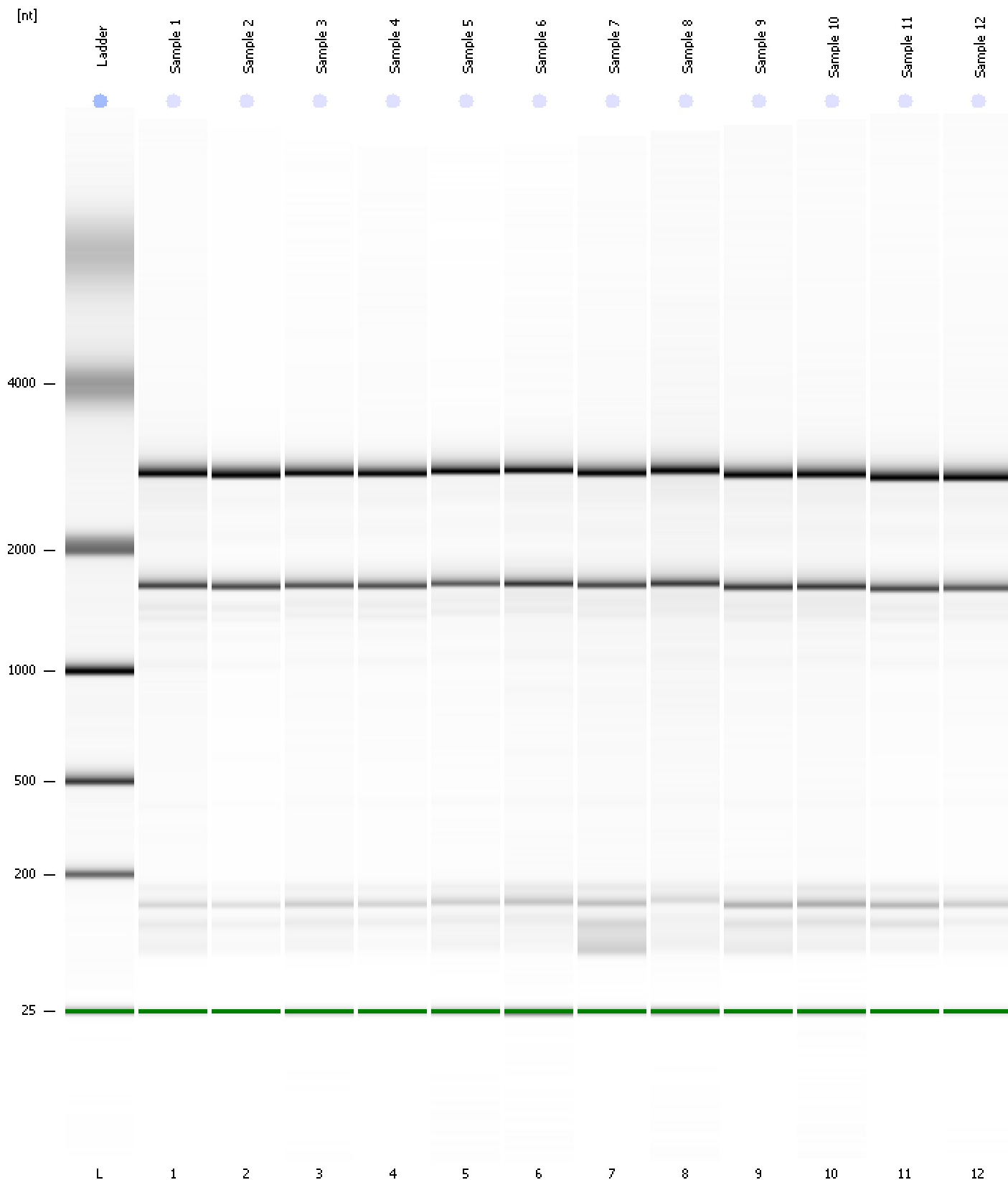
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,608	1,927	43.1	20.2
28S	2,783	3,305	66.8	31.3



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
Modified: 7/10/2013 11:06:46 AM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10\_002.xad

Created: 7/10/2013 10:42:57 AM  
 Modified: 7/10/2013 11:06:46 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		7/10/2013 11:06:44 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-10\2013-07-10_002.xad)		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/10/2013 10:43:02 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1