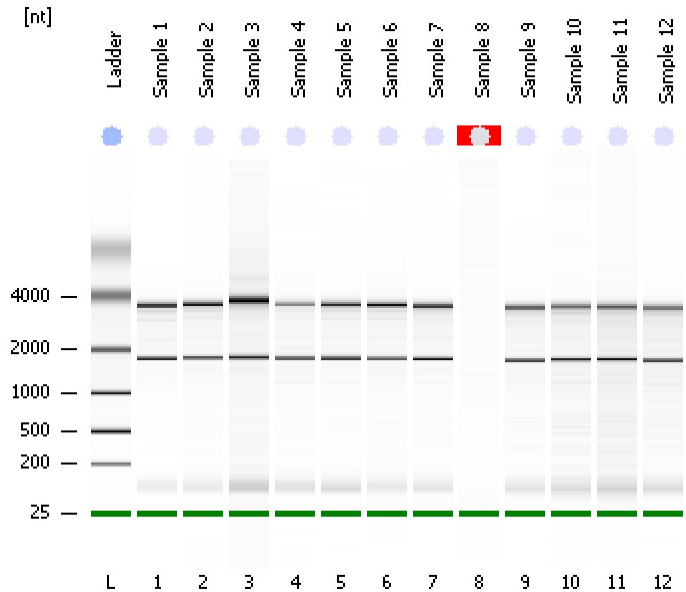


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

Electrophoresis File Run Summary



Instrument Information:

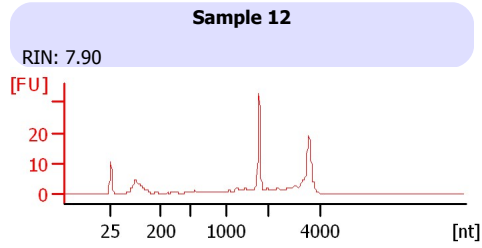
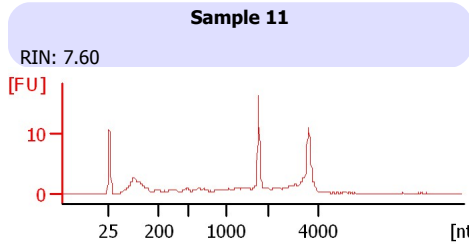
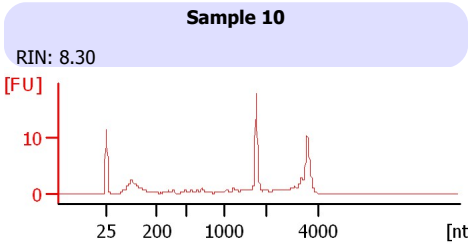
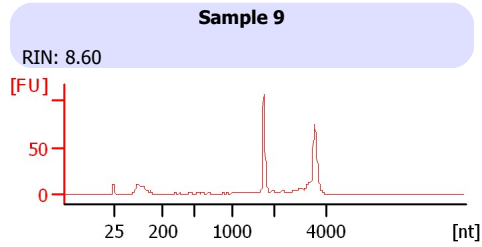
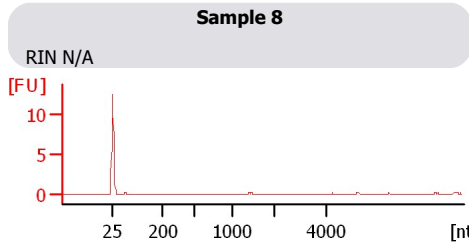
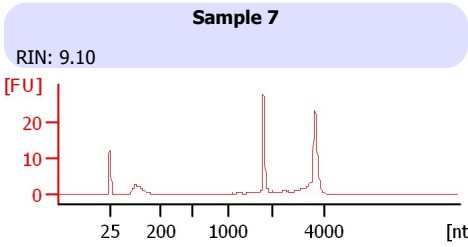
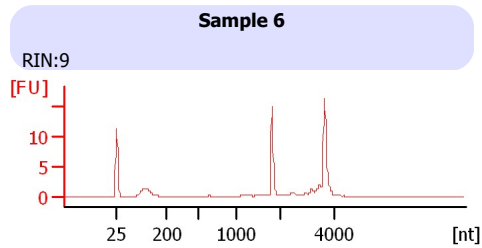
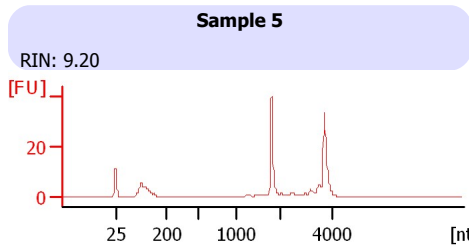
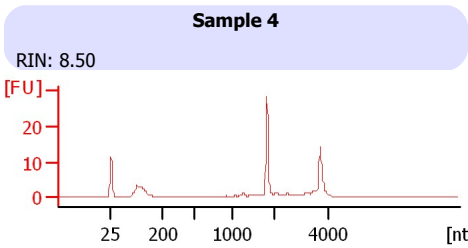
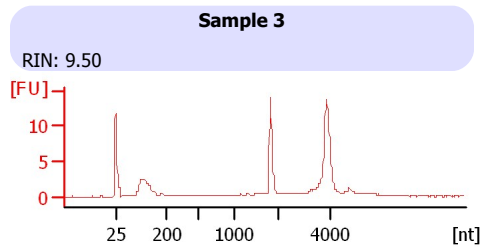
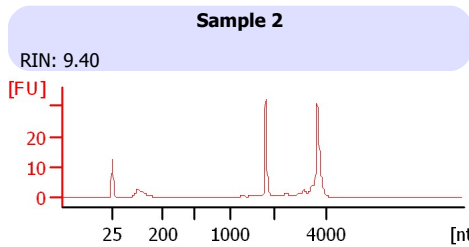
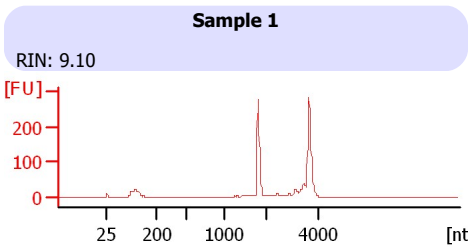
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 9.10	
Sample 2		✓	RIN: 9.40	
Sample 3		✓	RIN: 9.50	
Sample 4		✓	RIN: 8.50	
Sample 5		✓	RIN: 9.20	
Sample 6		✓	RIN:9	
Sample 7		✓	RIN: 9.10	
Sample 8		✓	RIN N/A	
Sample 9		✓	RIN: 8.60	
Sample 10		✓	RIN: 8.30	
Sample 11		✓	RIN: 7.60	
Sample 12		✓	RIN: 7.90	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 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

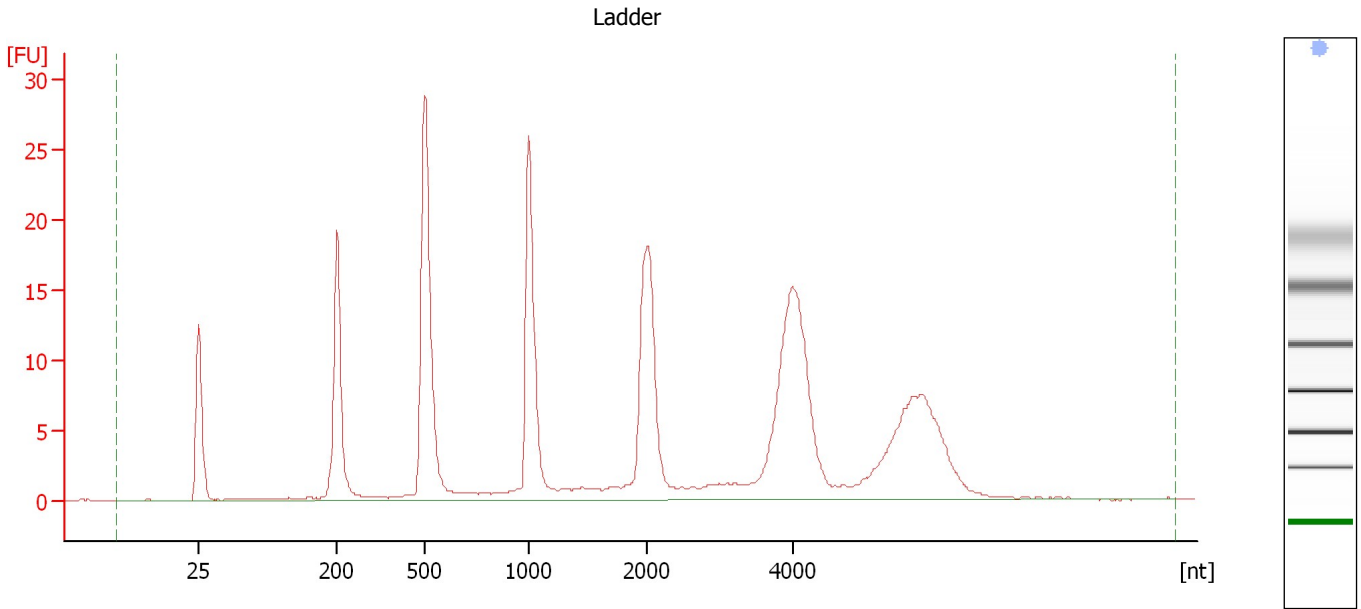
### Ladder

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\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary**



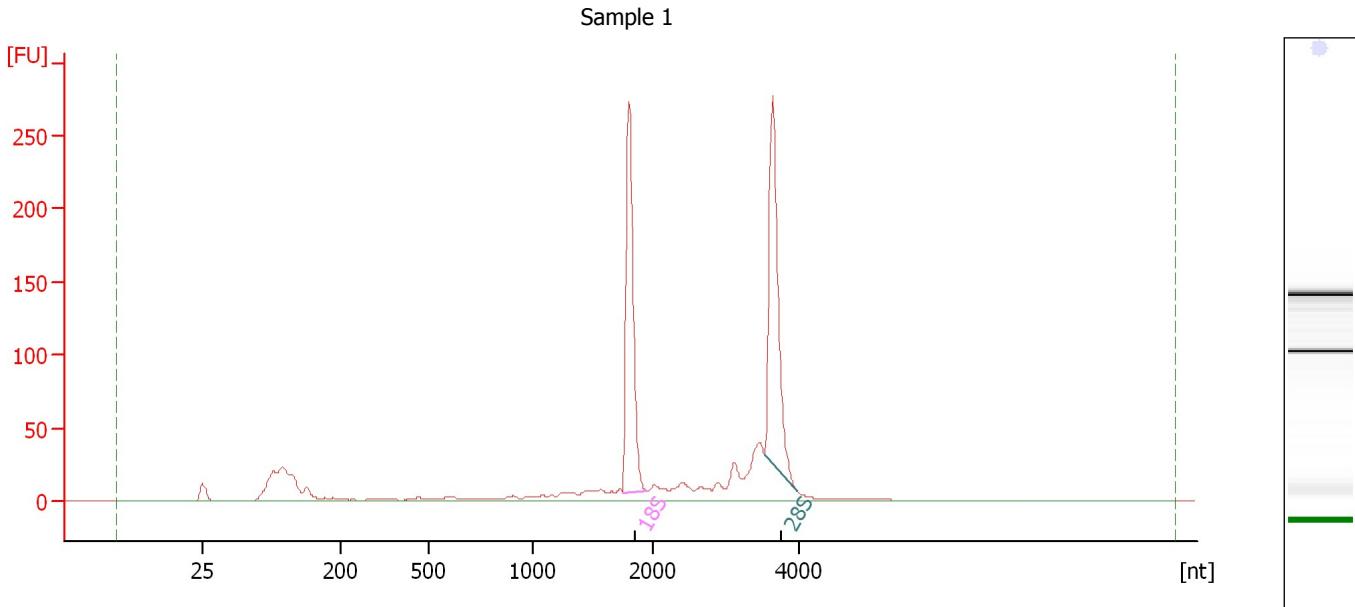
**Overall Results for Ladder**

RNA Area:	246.4	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\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	952.7	RNA Integrity Number (RIN):	9.1 (B.02.08)
RNA Concentration:	580 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]:	1.0	Result Flagging Label:	RIN: 9.10

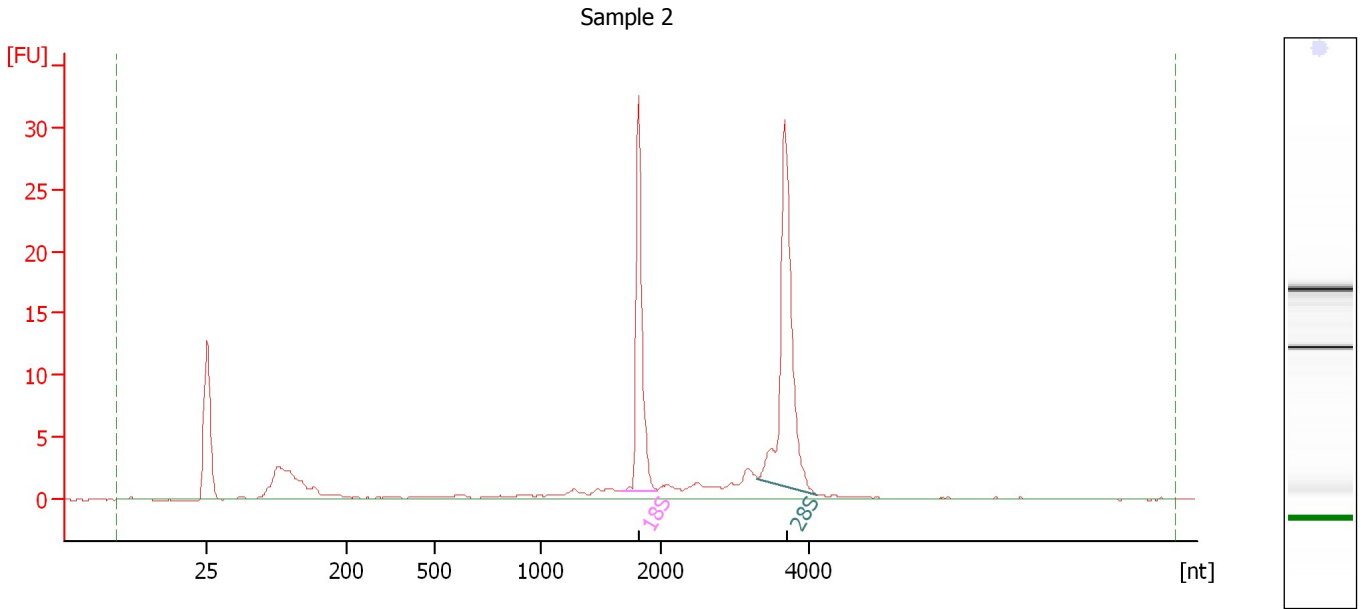
**Fragment table for sample 1 : Sample 1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,743	1,949	223.8	23.5
28S	3,524	3,977	233.2	24.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area: 109.0                      RNA Integrity Number (RIN): 9.4 (B.02.08)  
RNA Concentration: 66 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4                      Result Flagging Label: RIN: 9.40

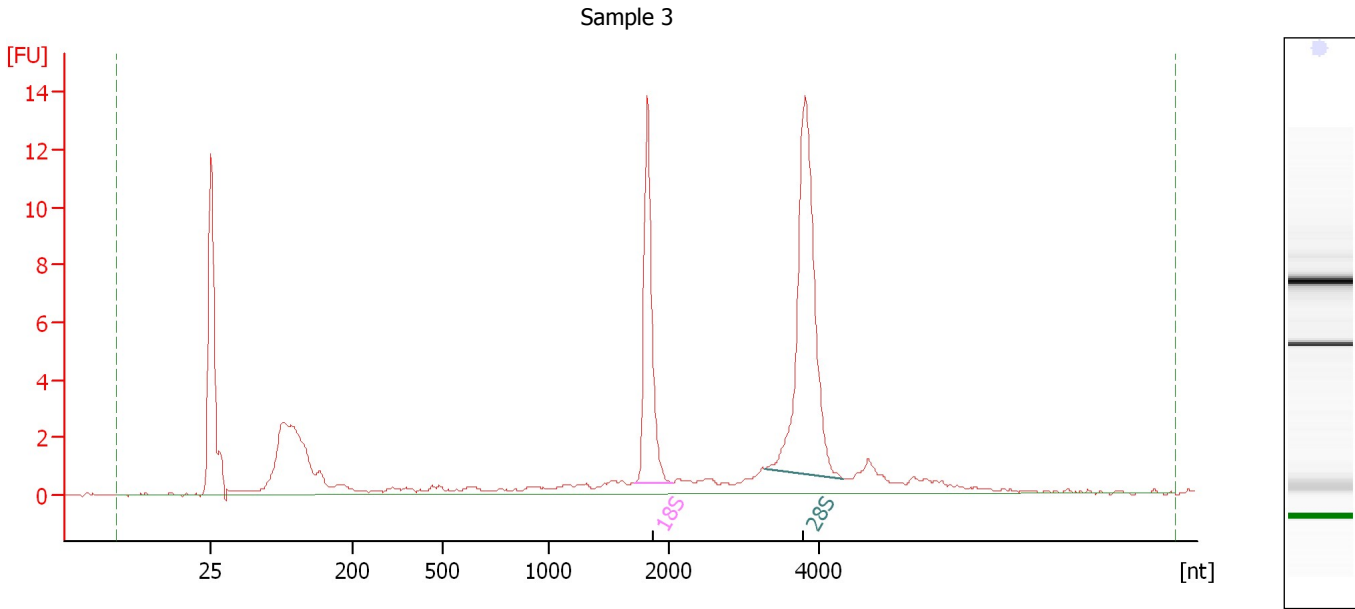
**Fragment table for sample 2 : Sample 2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,669	1,970	23.7	21.8
28S	3,299	4,125	34.0	31.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	76.6	RNA Integrity Number (RIN):	9.5 (B.02.08)
RNA Concentration:	47 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: 9.50

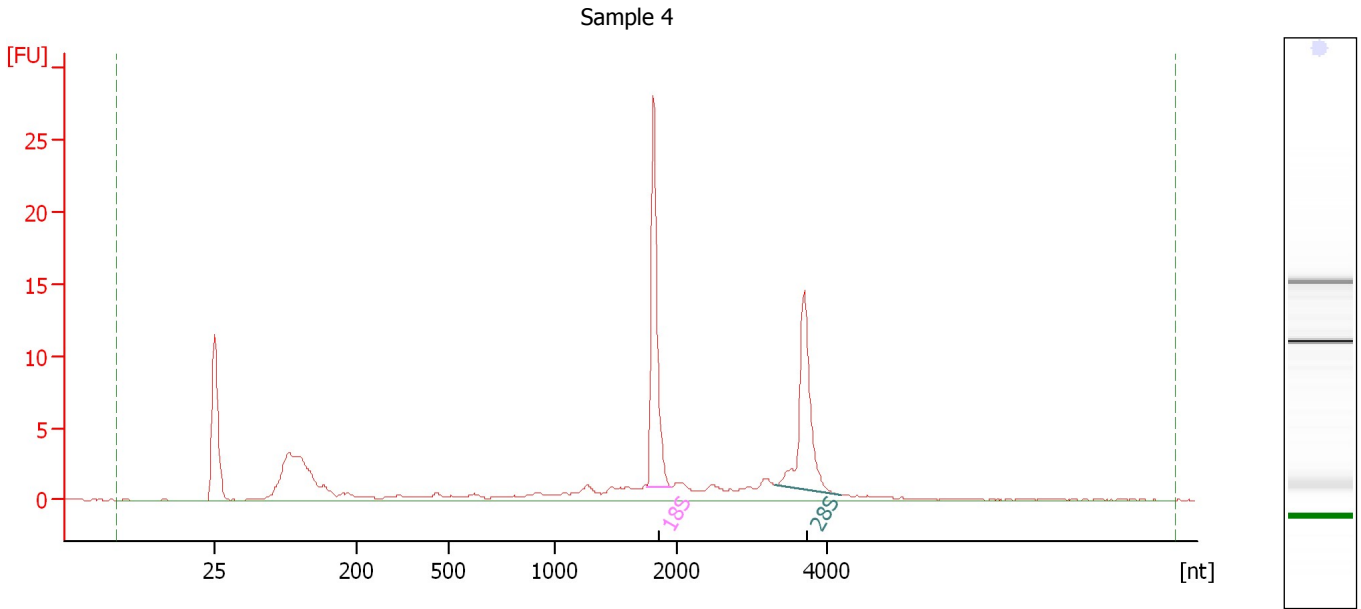
**Fragment table for sample 3 : Sample 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,710	2,044	12.4	16.1
28S	3,294	4,329	23.2	30.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area: 90.0                      RNA Integrity Number (RIN): 8.5 (B.02.08)  
RNA Concentration: 55 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.8              Result Flagging Label: RIN: 8.50

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

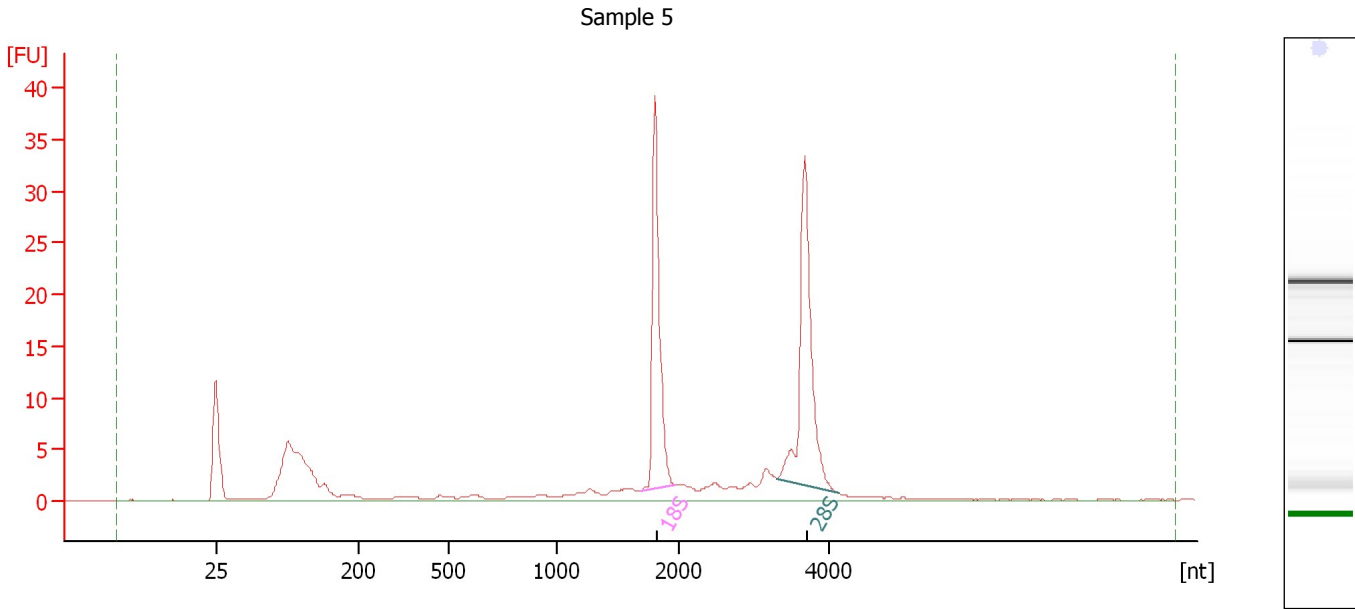
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,751	1,952	20.3	22.6
28S	3,304	4,173	15.4	17.1



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	149.4	RNA Integrity Number (RIN):	9.2 (B.02.08)
RNA Concentration:	91 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]:	1.1	Result Flagging Label:	RIN: 9.20

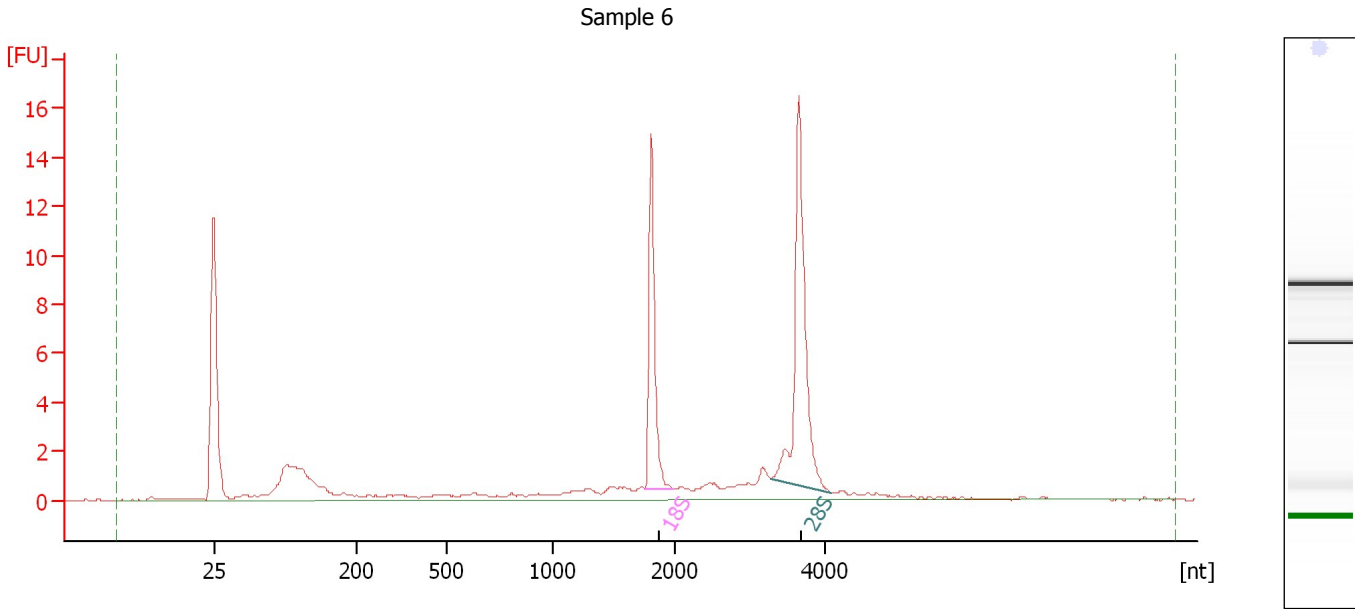
**Fragment table for sample 5 : Sample 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,692	1,970	32.5	21.8
28S	3,303	4,113	36.5	24.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area: 62.0                      RNA Integrity Number (RIN): 9 (B.02.08)  
RNA Concentration: 38 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6              Result Flagging Label: RIN:9

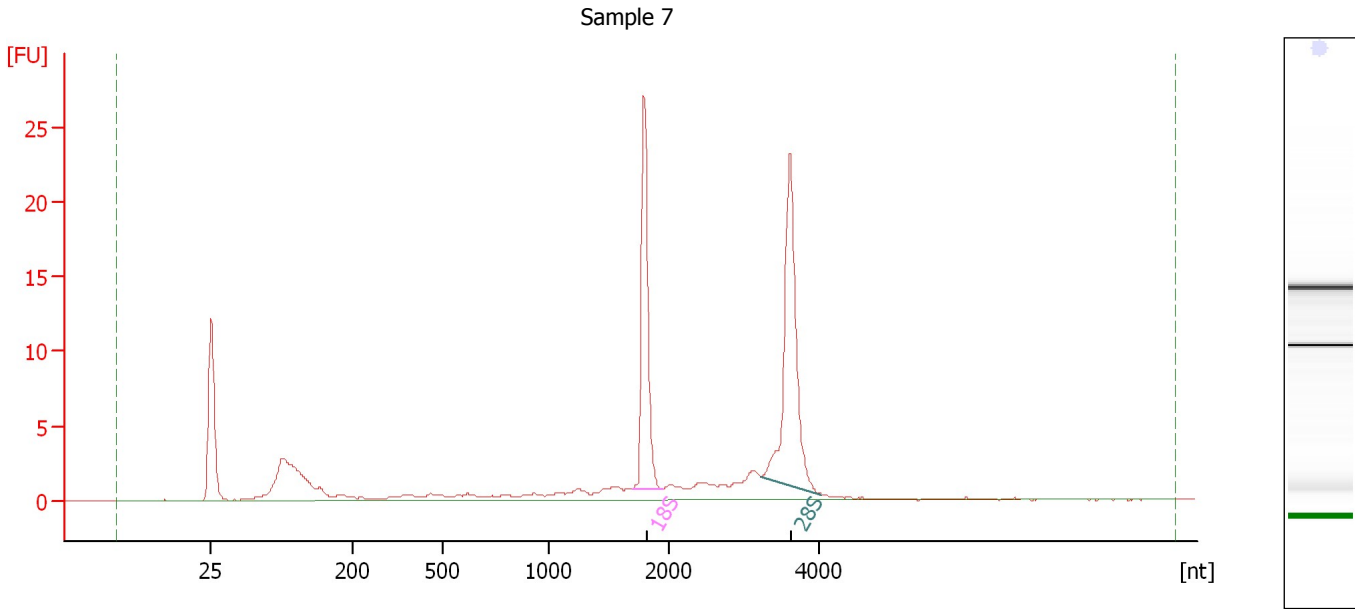
**Fragment table for sample 6 : Sample 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,750	1,986	10.5	16.9
28S	3,276	4,090	16.5	26.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	100.3	RNA Integrity Number (RIN):	9.1 (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]:	1.4	Result Flagging Label:	RIN: 9.10

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

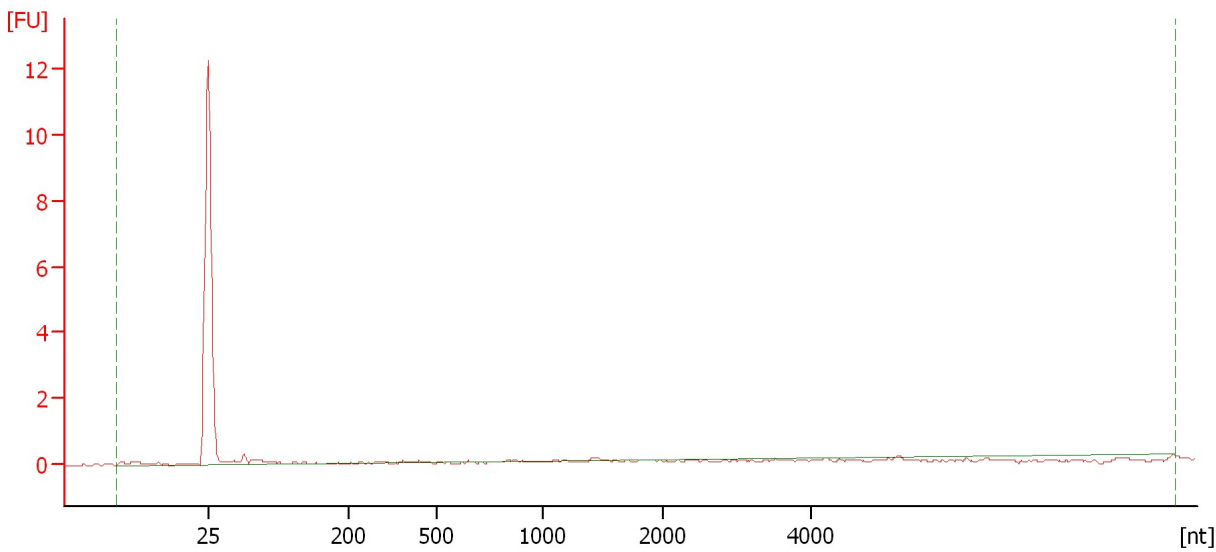
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,693	1,939	19.8	19.7
28S	3,237	4,042	27.0	26.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**

Sample 8



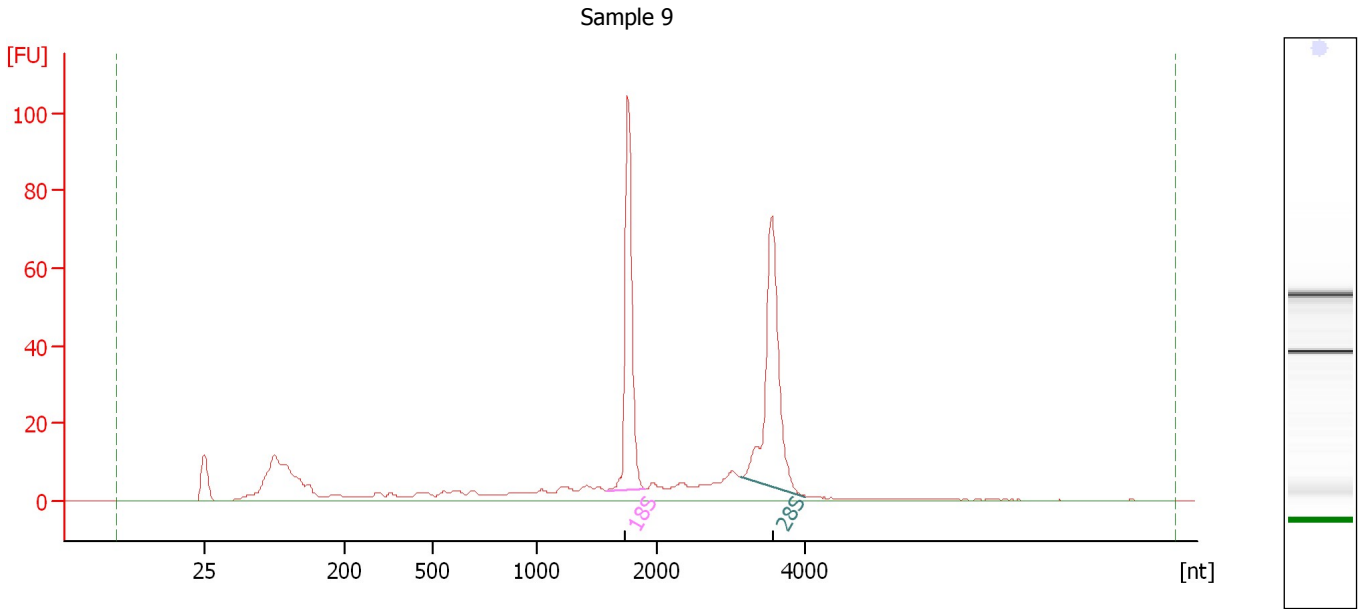
**Overall Results for sample 8 : Sample 8**

RNA Area:	2.2	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	1 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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	404.1	RNA Integrity Number (RIN):	8.6 (B.02.08)
RNA Concentration:	246 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]:	1.2	Result Flagging Label:	RIN: 8.60

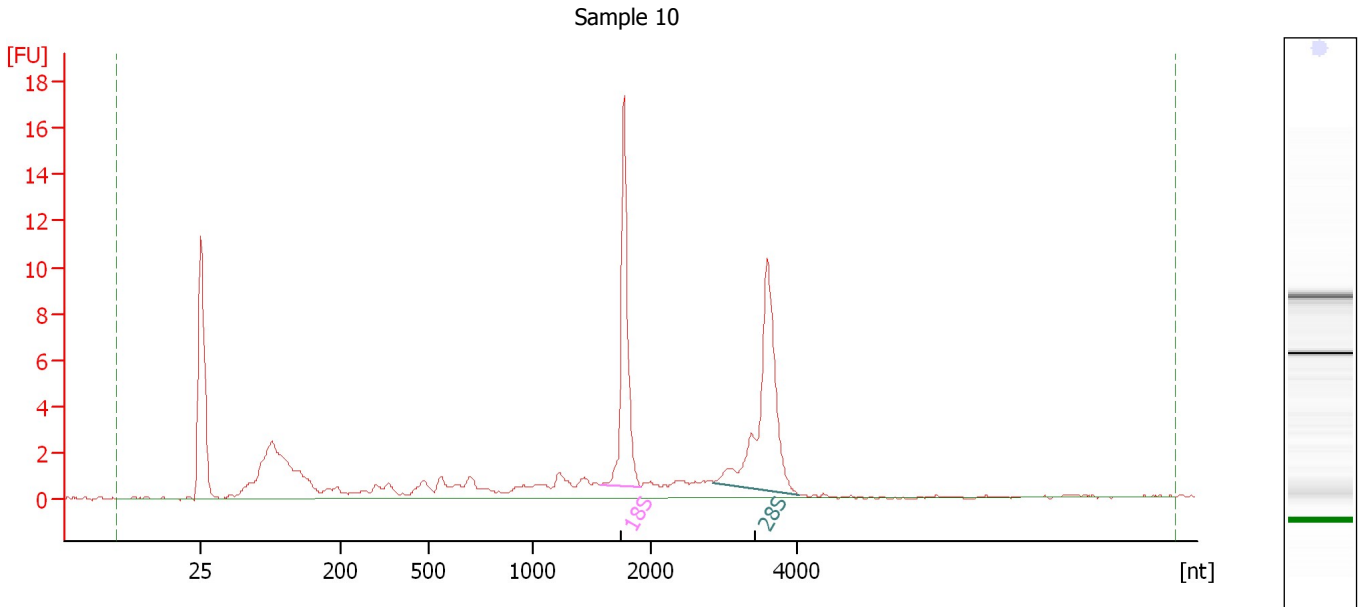
**Fragment table for sample 9 : Sample 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,576	1,897	81.9	20.3
28S	3,142	4,015	96.7	23.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	77.8	RNA Integrity Number (RIN):	8.3 (B.02.08)
RNA Concentration:	47 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: 8.30

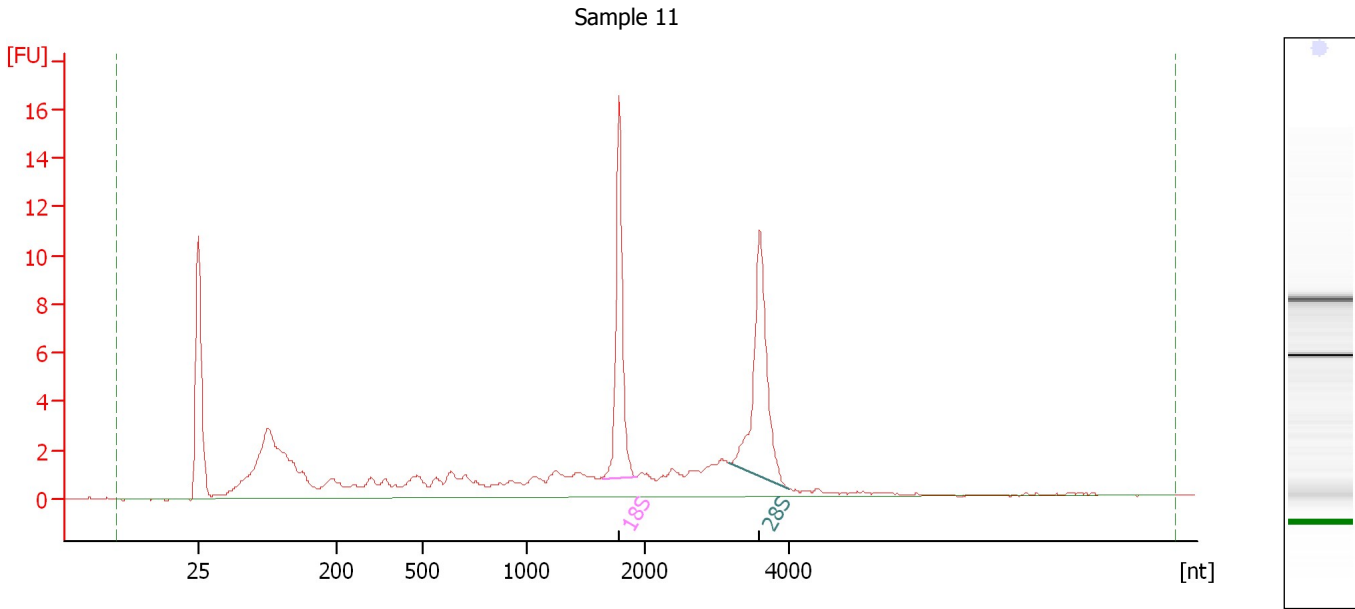
**Fragment table for sample 10 : Sample 10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,580	1,912	13.6	17.5
28S	2,852	4,023	17.7	22.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	93.0	RNA Integrity Number (RIN):	7.6 (B.02.08)
RNA Concentration:	57 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]:	1.2	Result Flagging Label:	RIN: 7.60

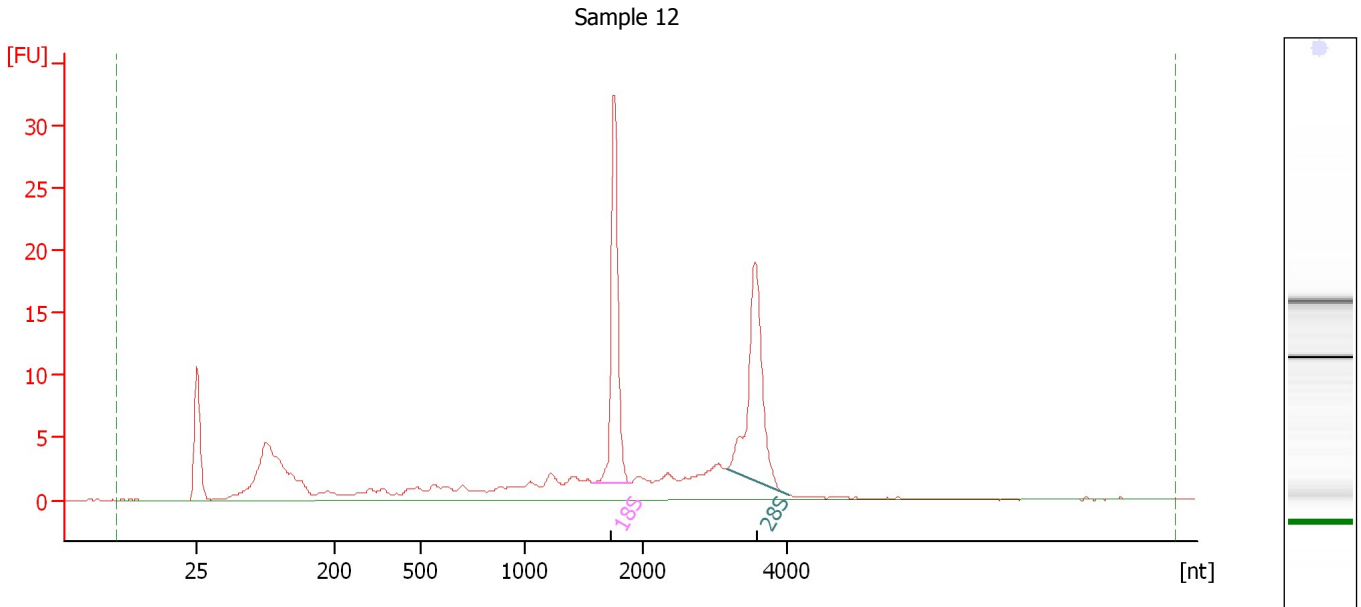
**Fragment table for sample 11 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,637	1,926	12.6	13.6
28S	3,162	3,988	14.6	15.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
 Modified: 6/24/2016 1:26:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	150.6	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	92 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]:	1.1	Result Flagging Label:	RIN: 7.90

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

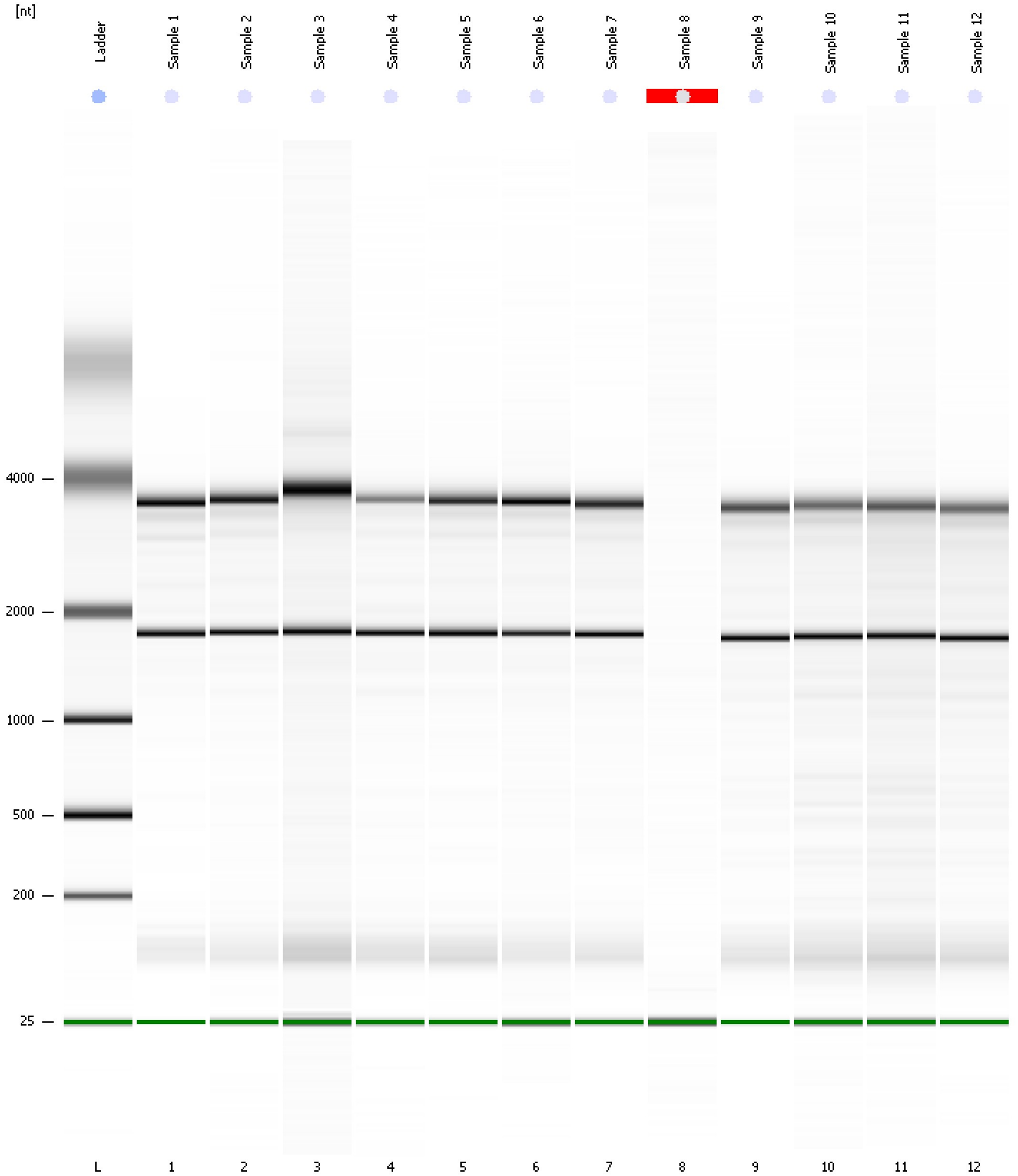
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,581	1,898	25.0	16.6
28S	3,163	4,005	26.7	17.7



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Gel Image**

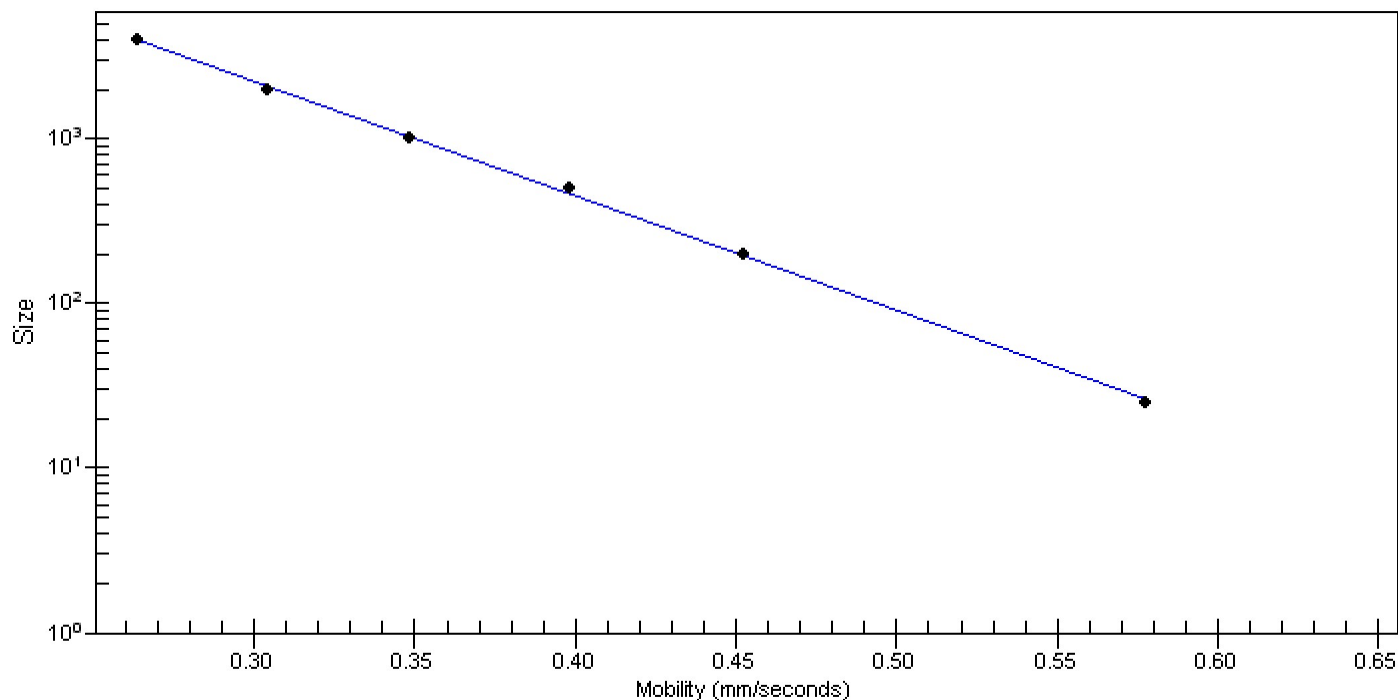


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
Modified: 6/24/2016 1:26:57 PM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_003.xad

Created: 6/24/2016 1:03:08 PM  
 Modified: 6/24/2016 1:26:57 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		6/24/2016 1:26:56 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\2016-06-24\2016-06-24_003.xad)		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/24/2016 1:03:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1