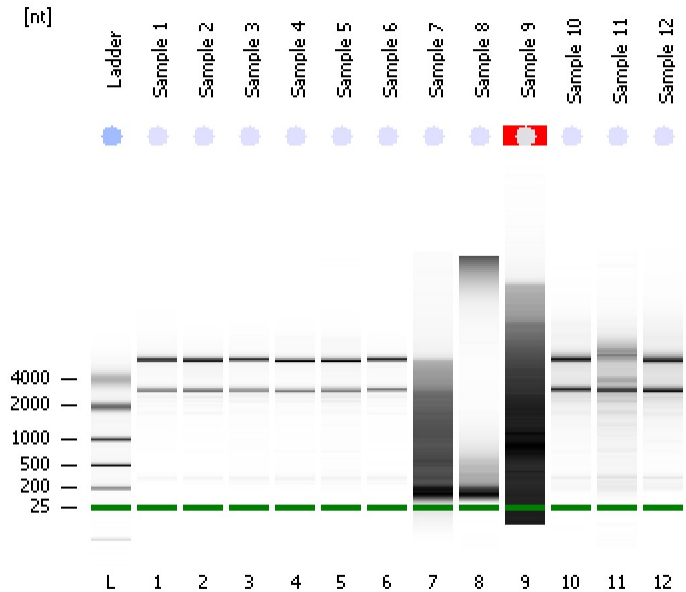


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

### Electrophoresis File Run Summary



#### Instrument Information:

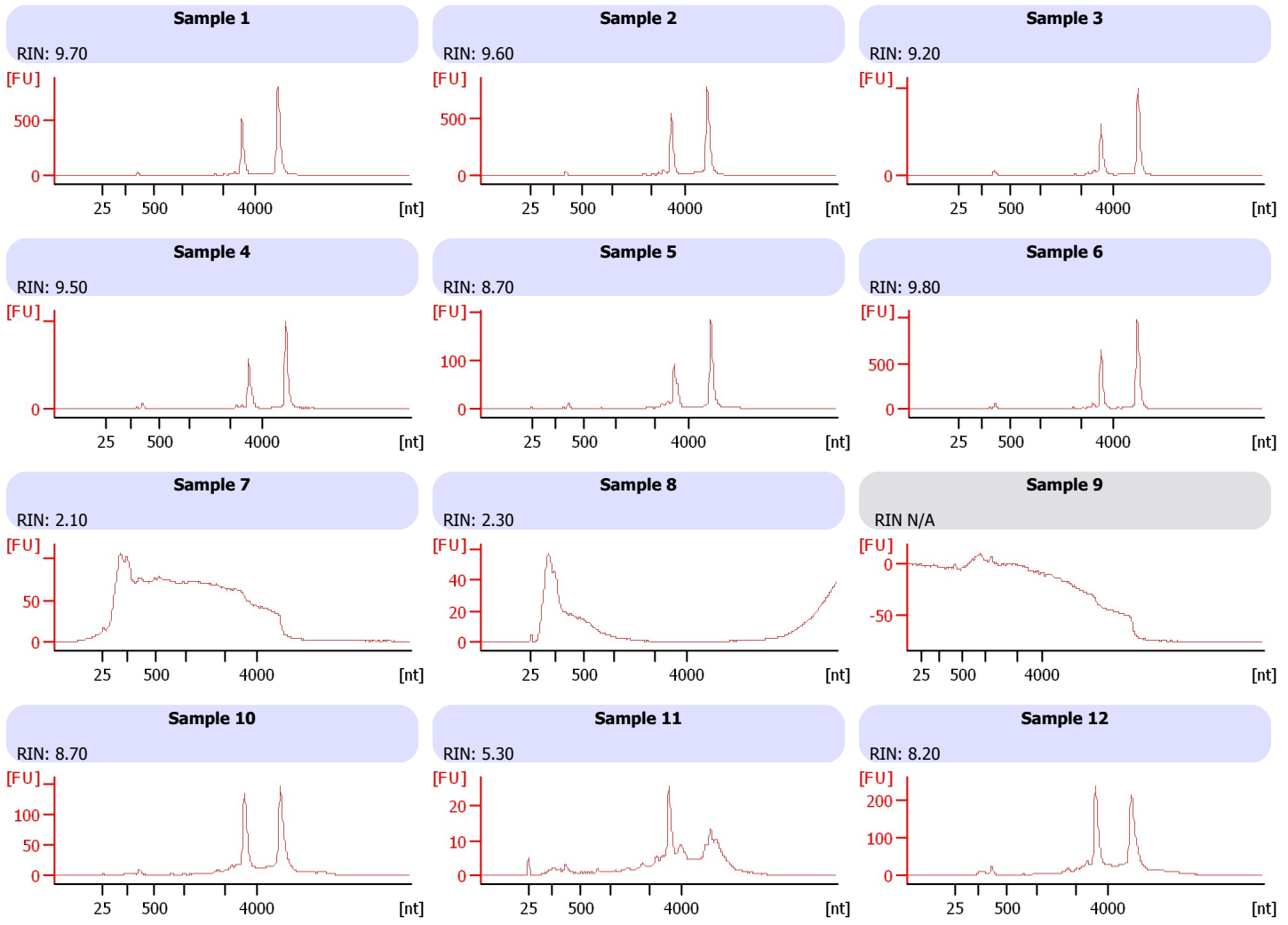
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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:



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
 Modified: 7/9/2014 10:55:29 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 9.70	
Sample 2		✓	RIN: 9.60	
Sample 3		✓	RIN: 9.20	
Sample 4		✓	RIN: 9.50	
Sample 5		✓	RIN: 8.70	
Sample 6		✓	RIN: 9.80	
Sample 7		✓	RIN: 2.10	
Sample 8		✓	RIN: 2.30	
Sample 9		✓	RIN N/A	
Sample 10		✓	RIN: 8.70	
Sample 11		✓	RIN: 5.30	
Sample 12		✓	RIN: 8.20	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 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

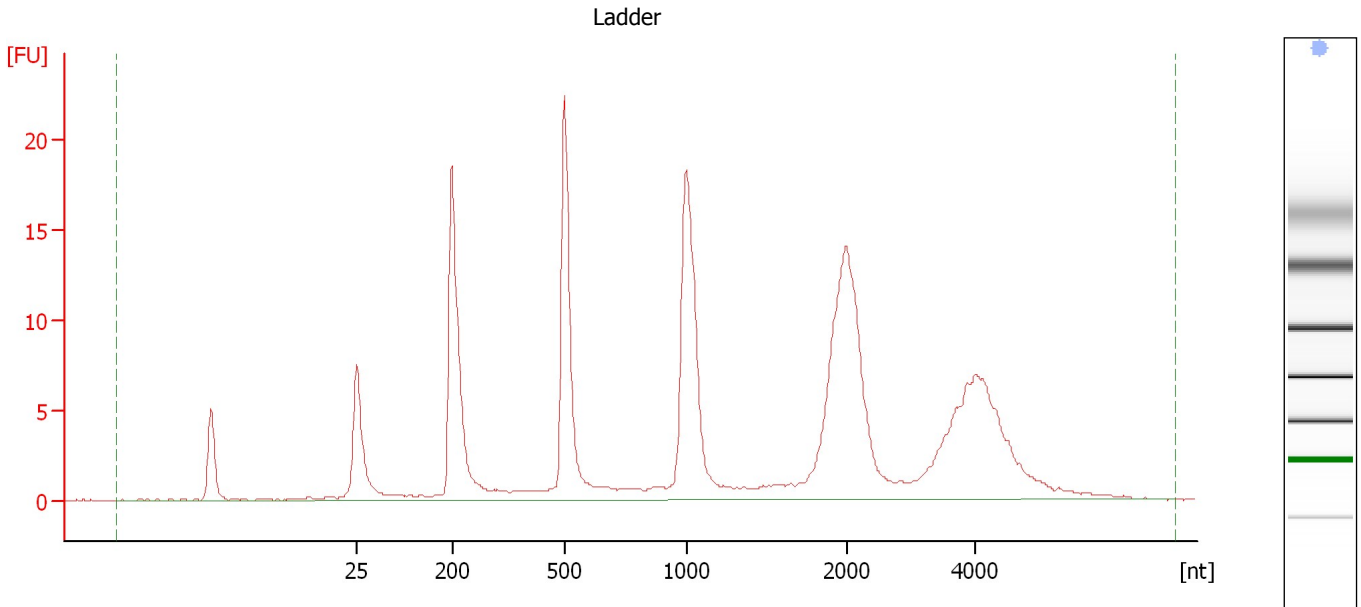
**Ladder**

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary**



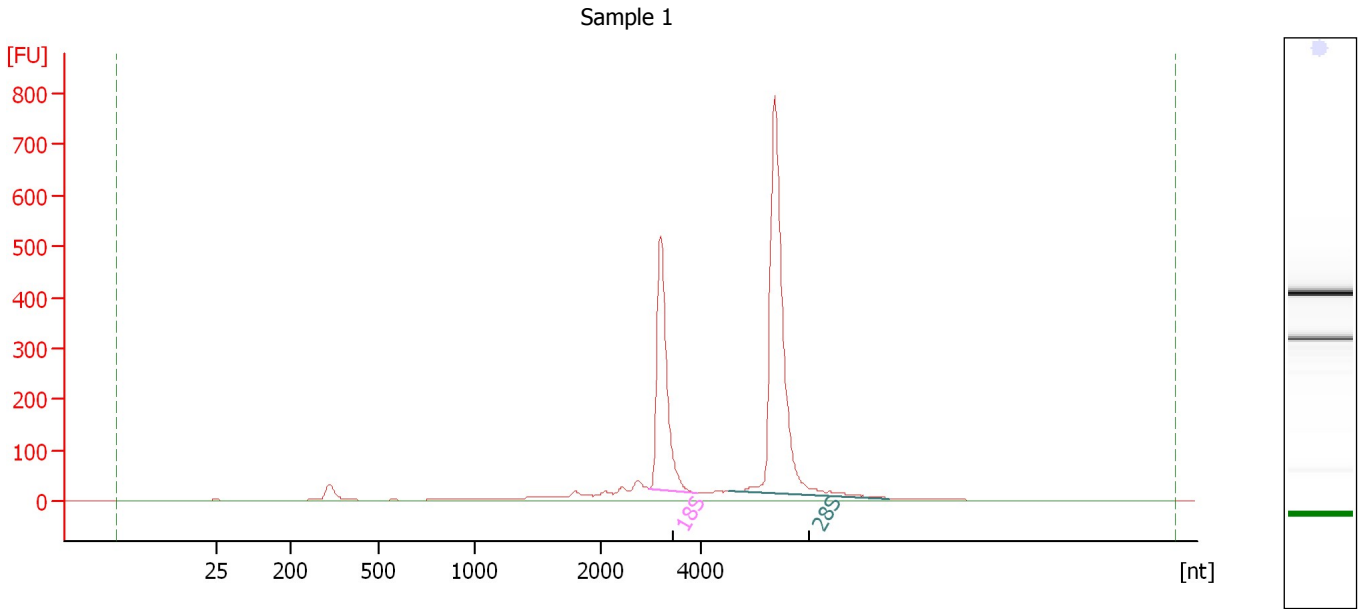
**Overall Results for Ladder**

RNA Area:	195.7	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\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	2,402.8	RNA Integrity Number (RIN):	9.7 (B.02.08)
RNA Concentration:	1,842 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: 9.70

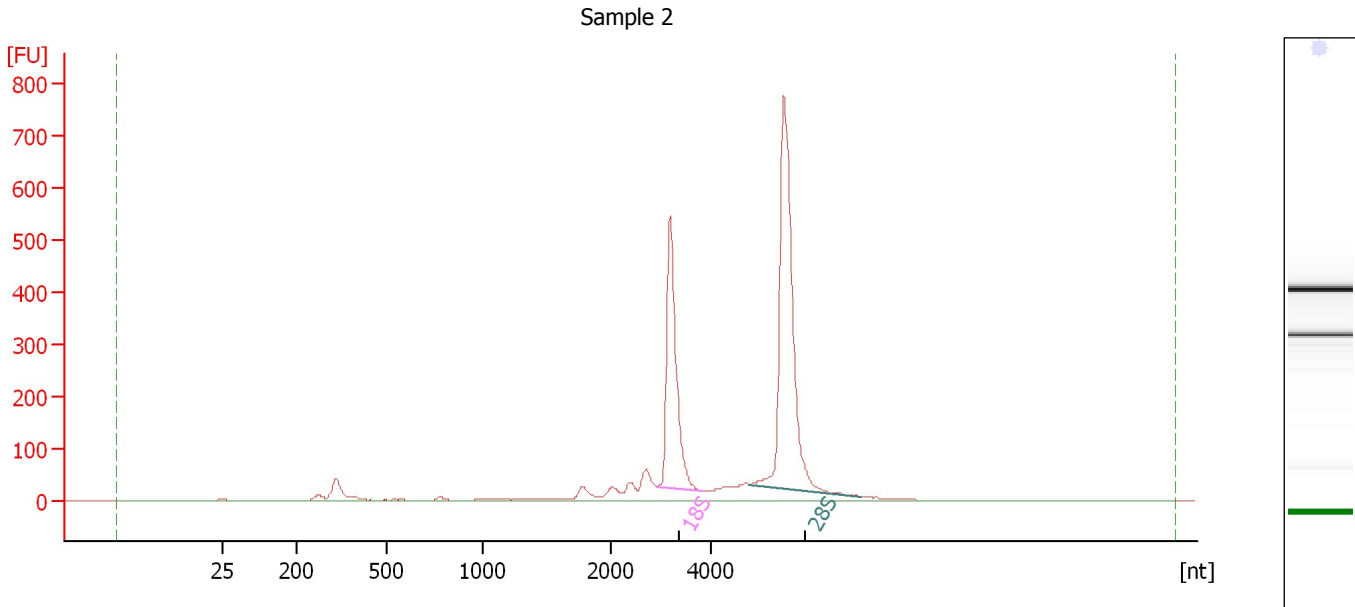
**Fragment table for sample 1 : Sample 1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,961	3,895	567.6	23.6
28S	4,553	7,715	1,067.6	44.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
 Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	2,490.3	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	1,909 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]:	1.7	Result Flagging Label:	RIN: 9.60

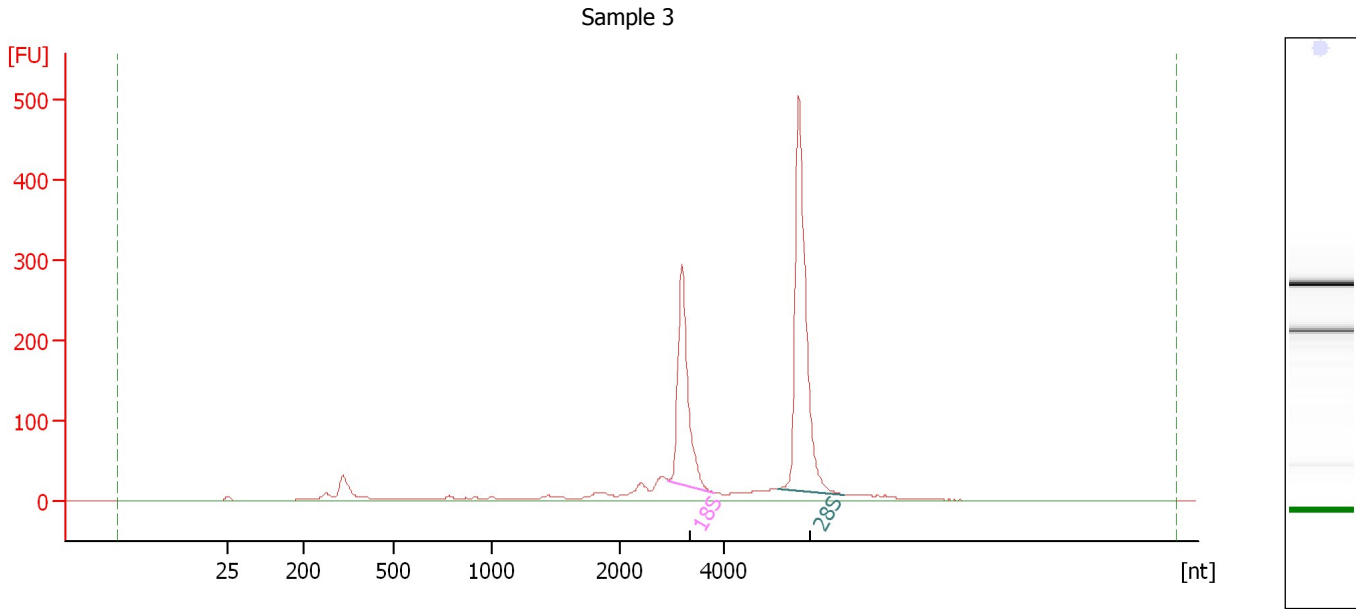
**Fragment table for sample 2 : Sample 2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,936	3,839	591.3	23.7
28S	4,742	6,927	1,004.9	40.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,464.0	RNA Integrity Number (RIN):	9.2 (B.02.08)
RNA Concentration:	1,122 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]:	1.7	Result Flagging Label:	RIN: 9.20

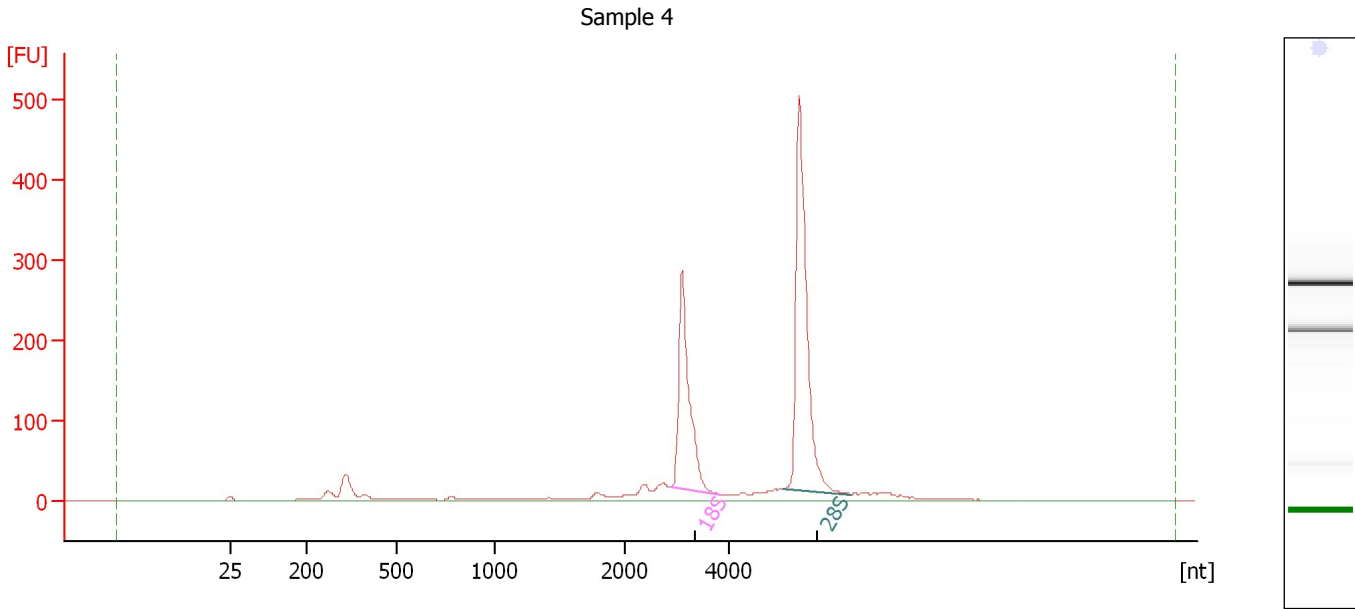
**Fragment table for sample 3 : Sample 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,932	3,826	317.8	21.7
28S	5,074	6,363	550.3	37.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,395.7	RNA Integrity Number (RIN):	9.5 (B.02.08)
RNA Concentration:	1,070 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: 9.50

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

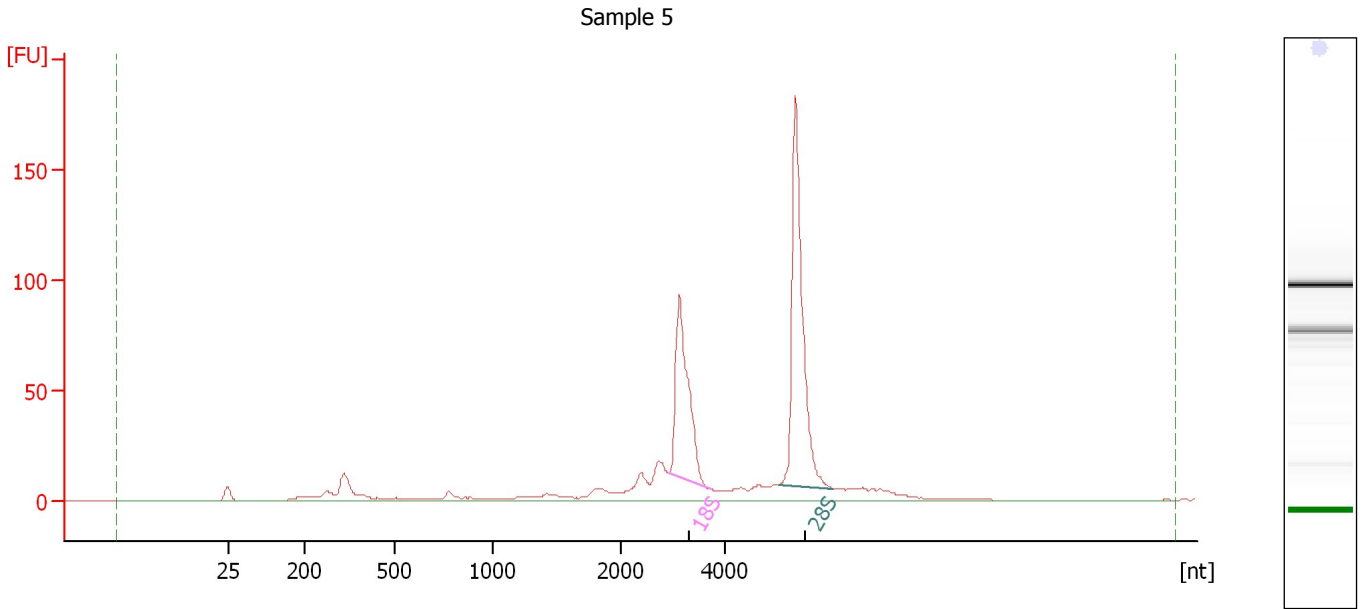
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,880	3,852	332.7	23.8
28S	5,050	6,373	538.0	38.5



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
 Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	597.5	RNA Integrity Number (RIN):	8.7 (B.02.08)
RNA Concentration:	458 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: 8.70

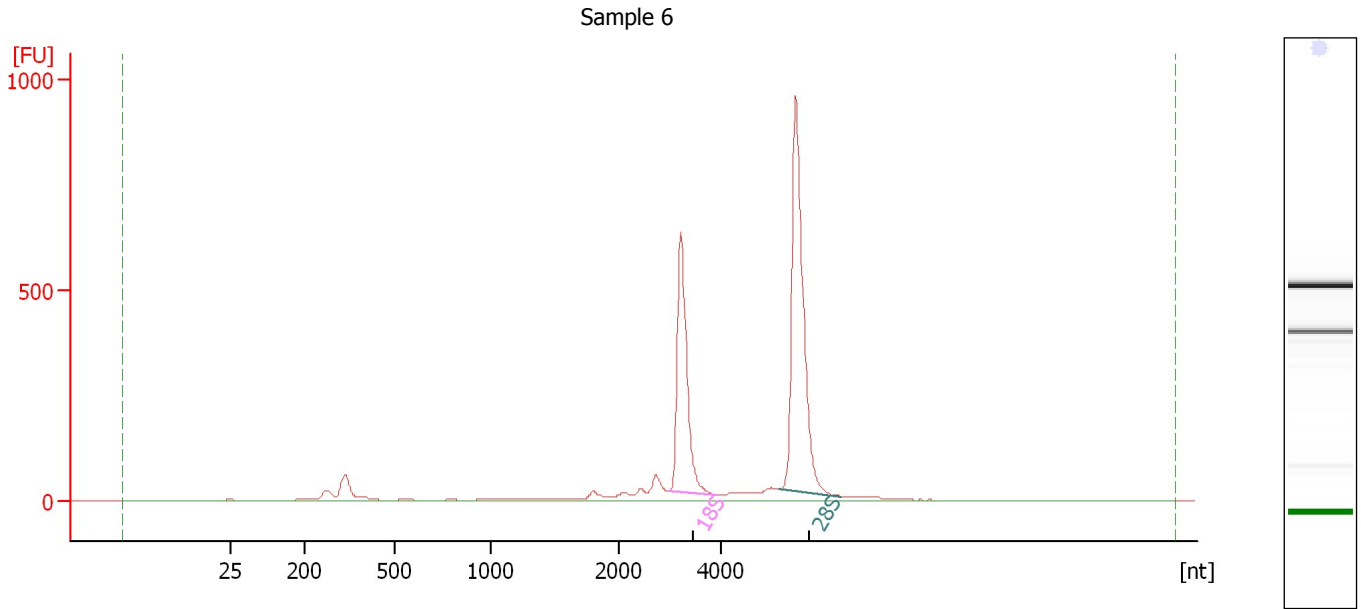
**Fragment table for sample 5 : Sample 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,915	3,724	118.8	19.9
28S	5,073	6,131	195.2	32.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	2,694.6	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	2,065 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: 9.80

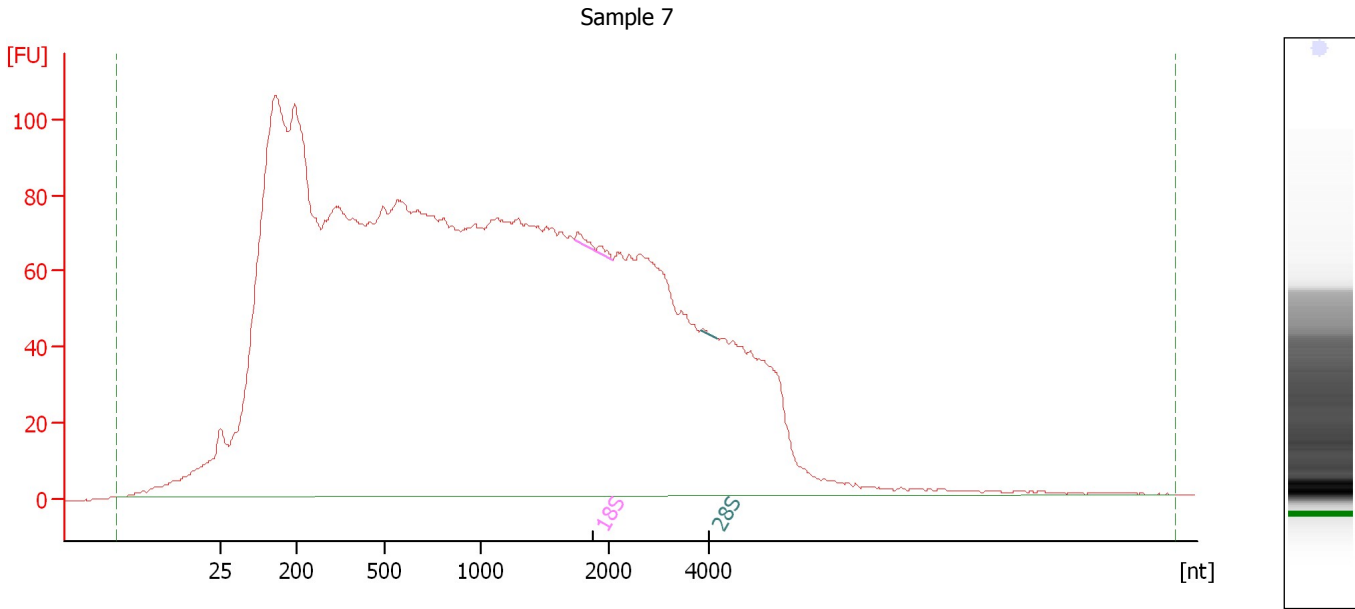
**Fragment table for sample 6 : Sample 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,967	3,948	689.2	25.6
28S	5,159	6,370	1,120.2	41.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area: 4,789.1                      RNA Integrity Number (RIN): 2.1 (B.02.08)  
RNA Concentration: 3,671 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.1                      Result Flagging Label: RIN: 2.10

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

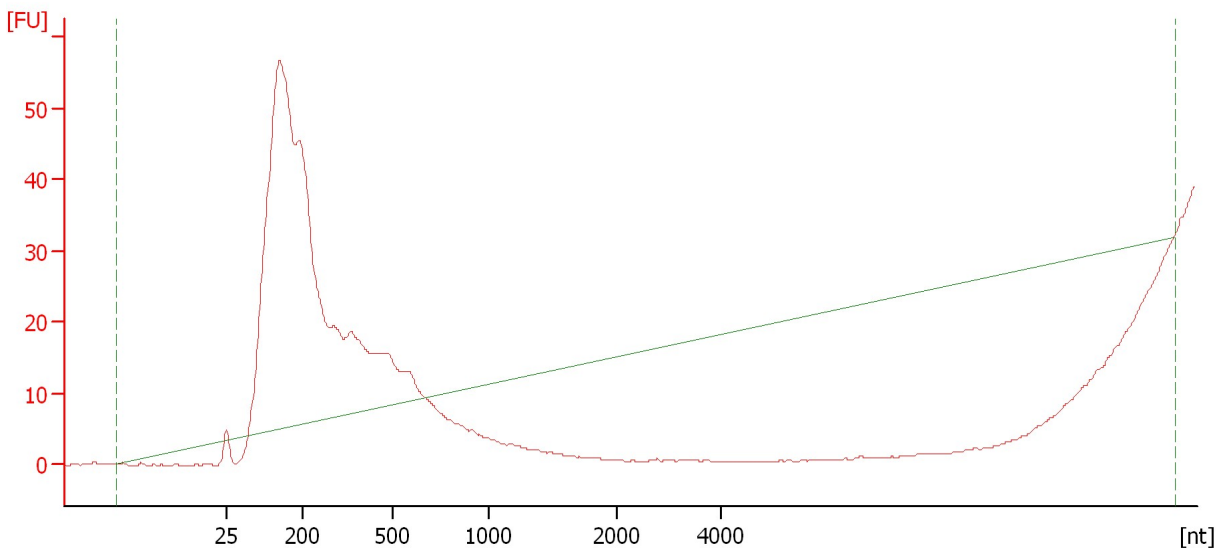
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,733	2,112	5.8	0.1
28S	3,816	4,132	0.7	0.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**

Sample 8



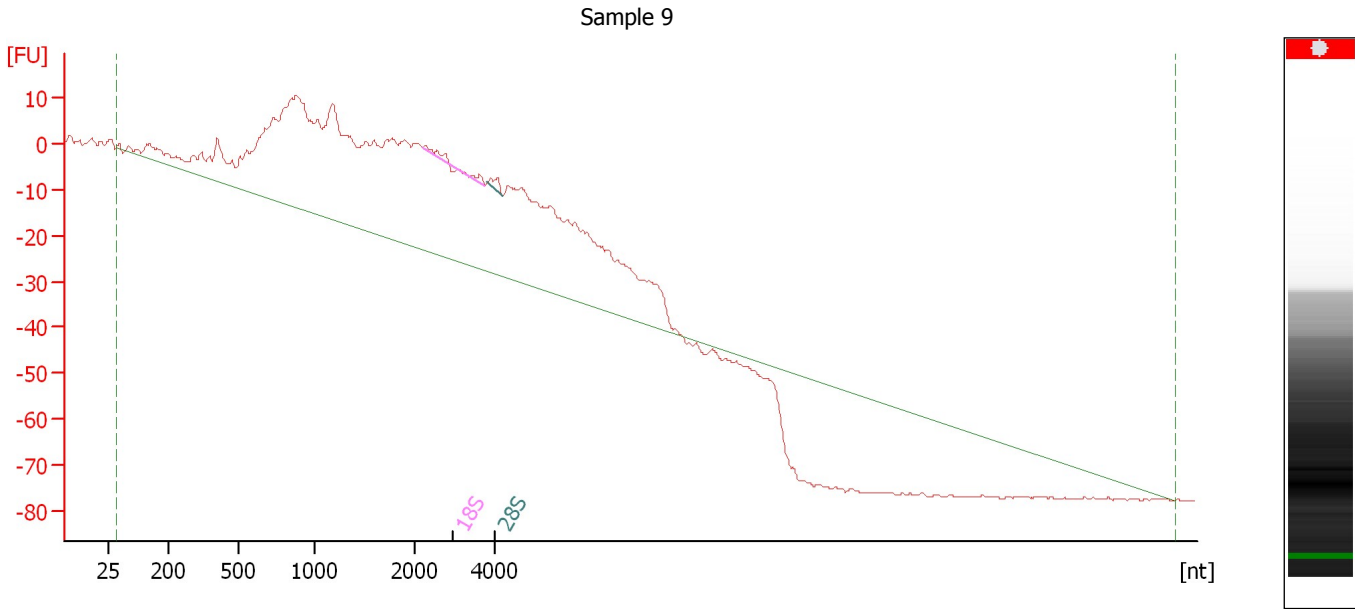
**Overall Results for sample 8 : Sample 8**

RNA Area:	520.1	RNA Integrity Number (RIN):	2.3 (B.02.08)
RNA Concentration:	399 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]:	0.0	Result Flagging Label:	RIN: 2.30

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
 Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,131.0	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	867 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]:	0.7	Result Flagging Label:	RIN N/A

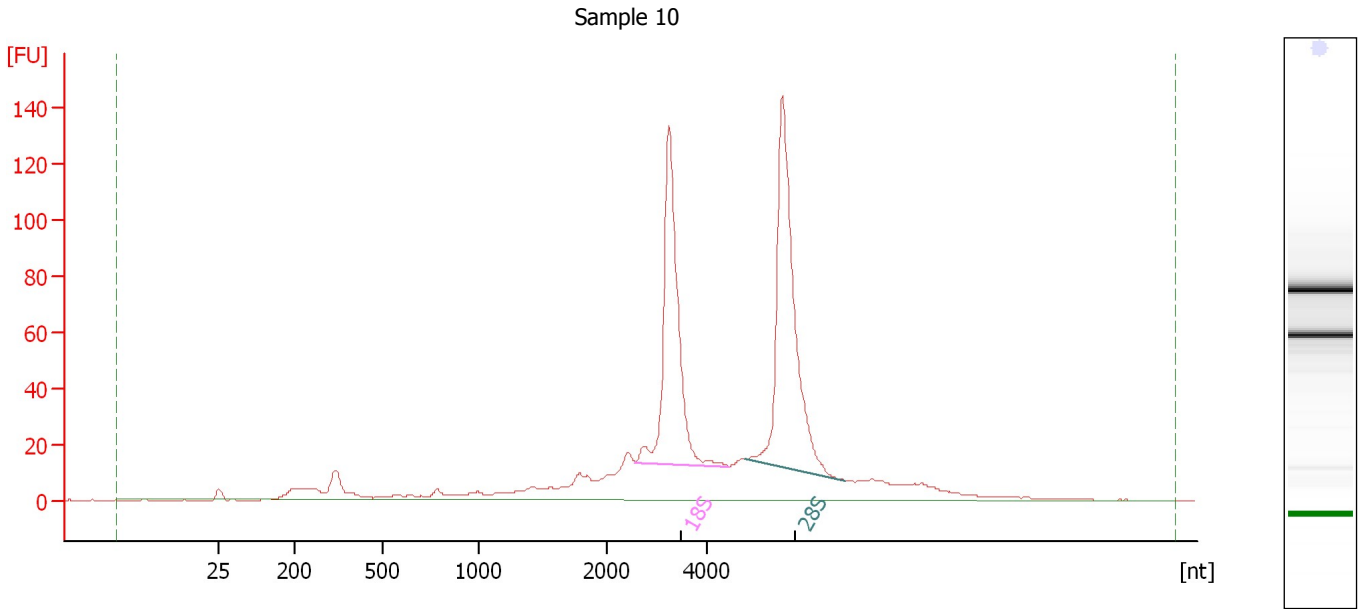
**Fragment table for sample 9 : Sample 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,224	3,787	4.0	0.4
28S	3,840	4,215	3.0	0.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area: 941.4                      RNA Integrity Number (RIN): 8.7 (B.02.08)  
RNA Concentration: 722 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.2                      Result Flagging Label: RIN: 8.70

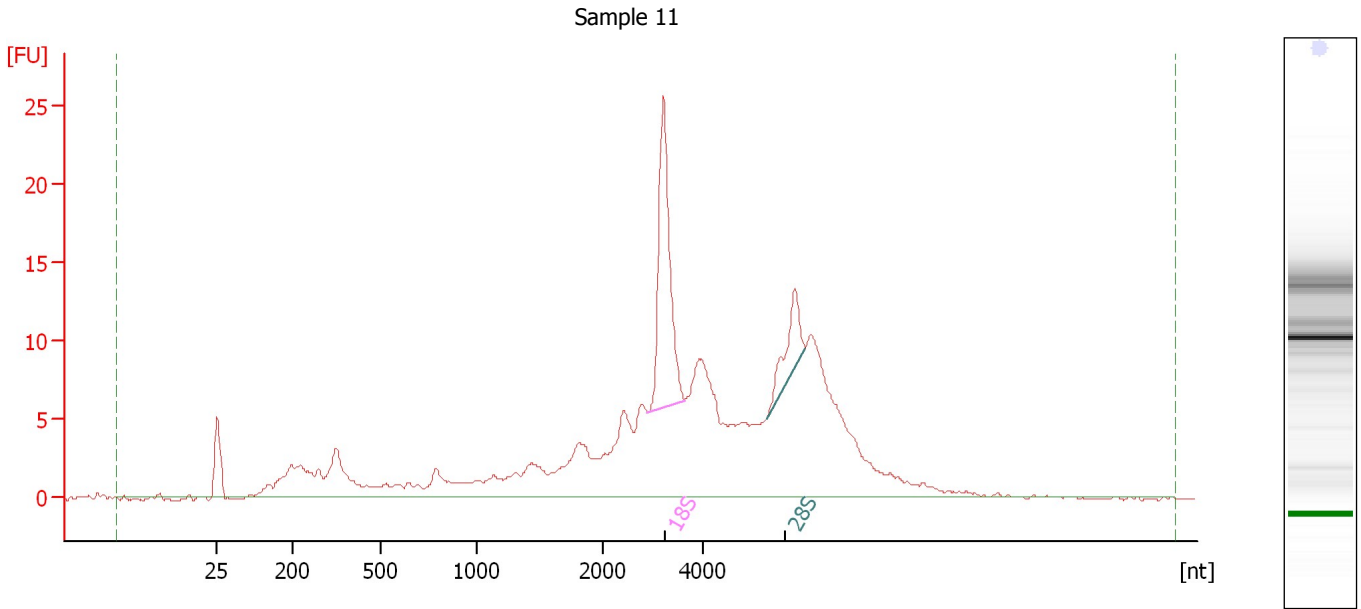
**Fragment table for sample 10 : Sample 10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,570	4,426	201.7	21.4
28S	4,743	6,725	240.6	25.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	255.9	RNA Integrity Number (RIN):	5.3 (B.02.08)
RNA Concentration:	196 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]:	0.3	Result Flagging Label:	RIN: 5.30

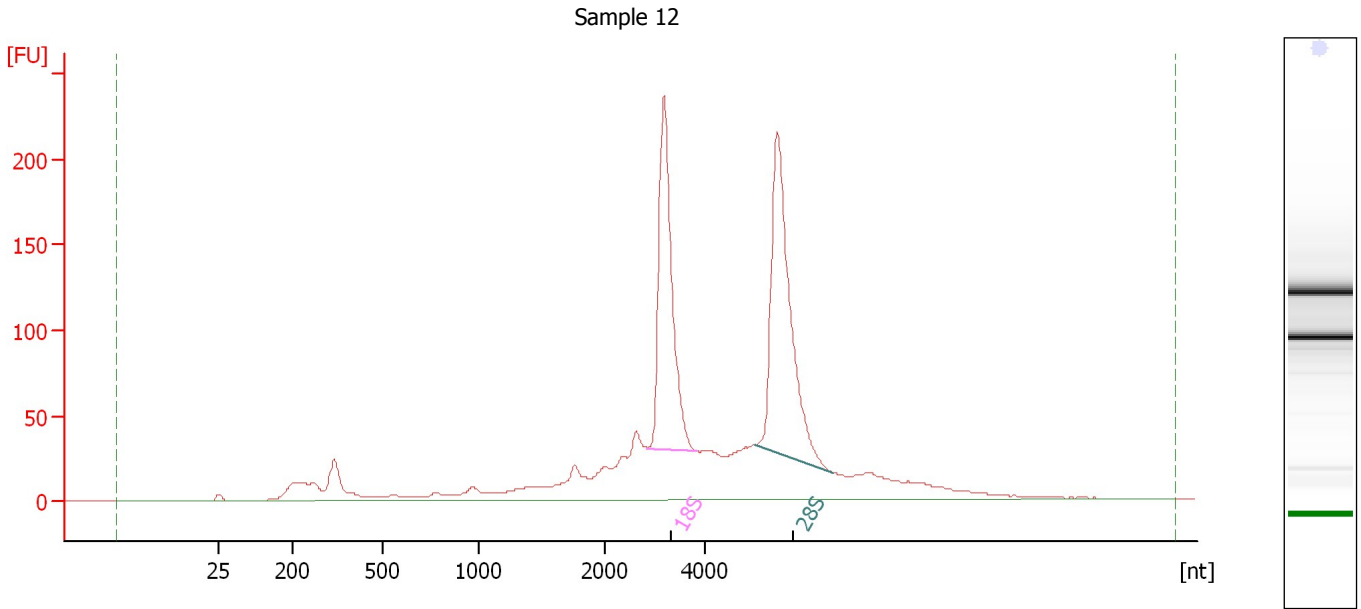
**Fragment table for sample 11 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,880	3,621	25.6	10.0
28S	5,251	6,014	7.6	3.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,744.2	RNA Integrity Number (RIN):	8.2 (B.02.08)
RNA Concentration:	1,337 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: 8.20

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

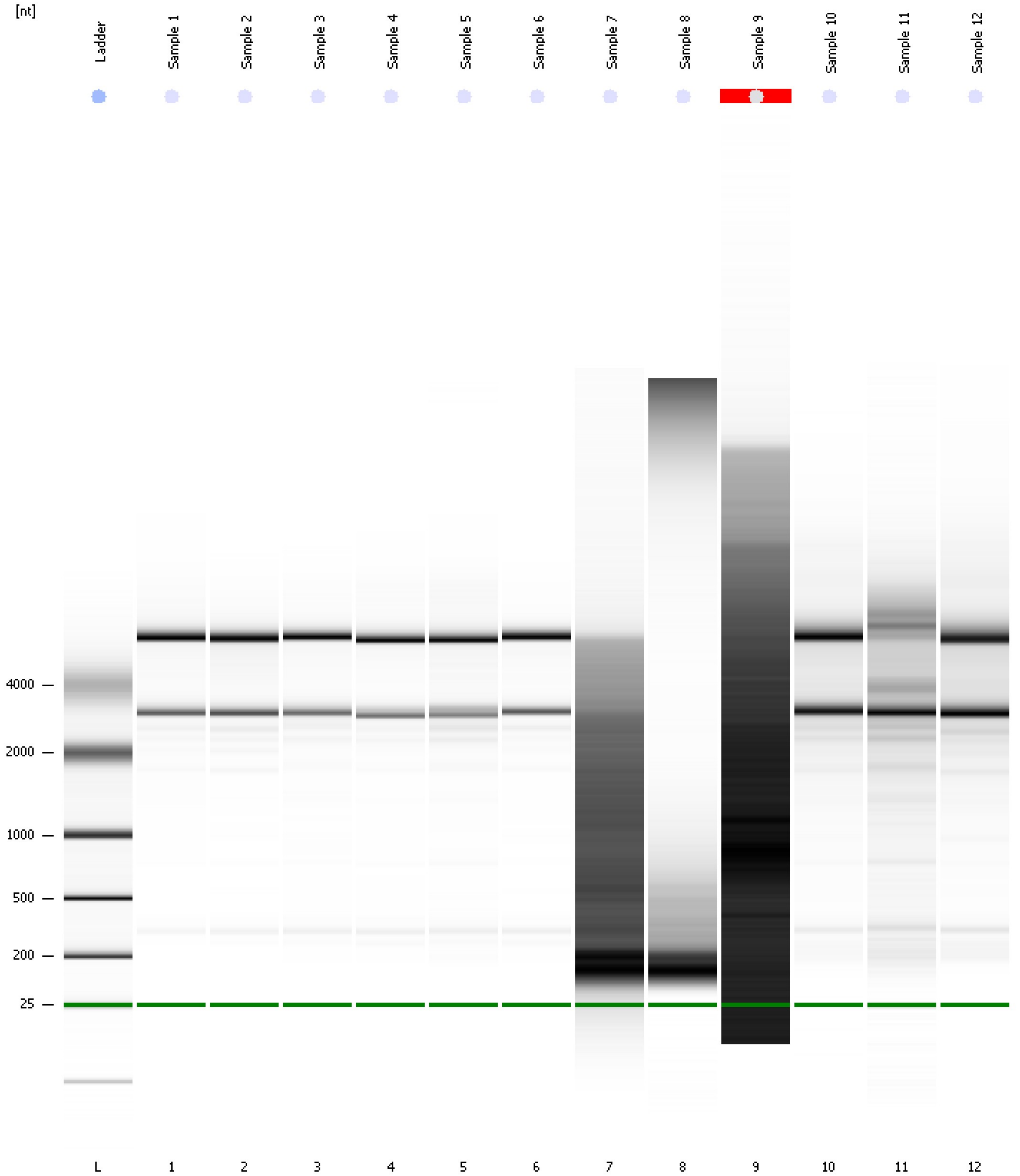
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,841	3,834	317.3	18.2
28S	4,975	6,539	377.3	21.6



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Gel Image**

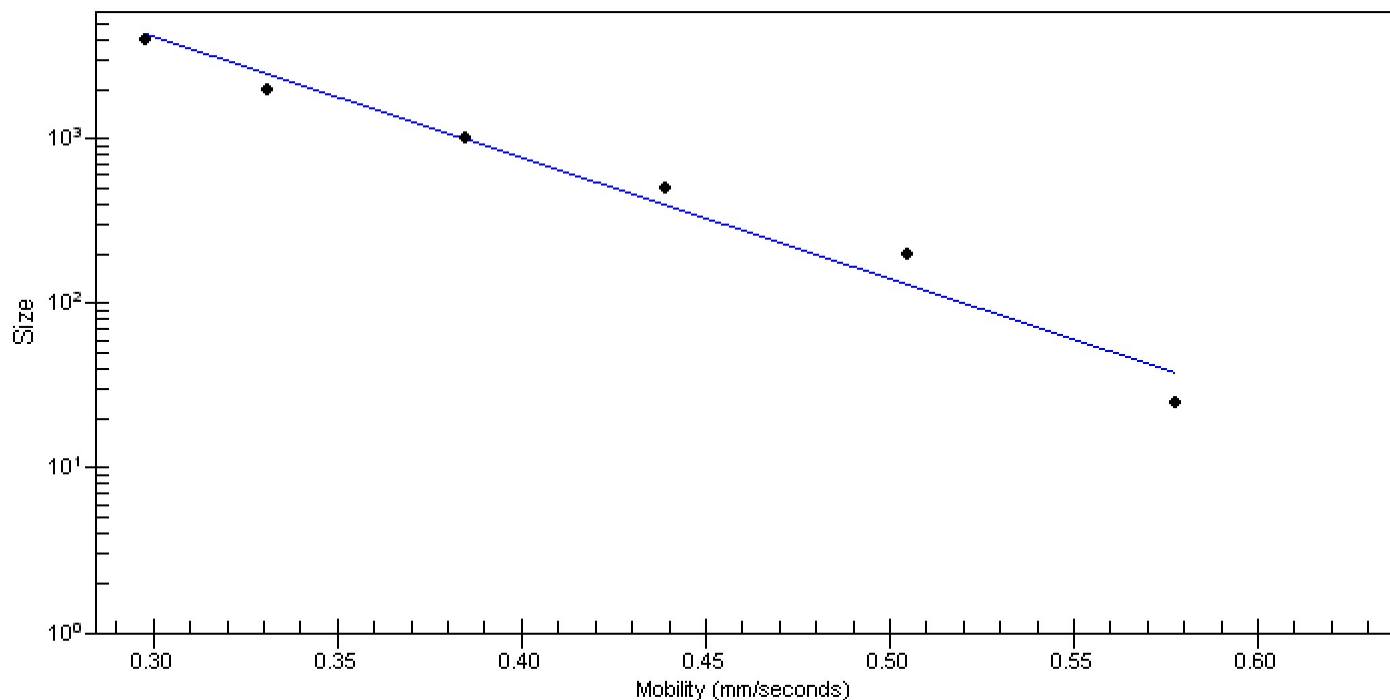


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
Modified: 7/9/2014 10:55:29 AM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09\_001.xad

Created: 7/9/2014 10:31:37 AM  
 Modified: 7/9/2014 10:55:29 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		7/9/2014 10:55:27 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-09\2014-07-09_001.xad)		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/9/2014 10:31:43 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1