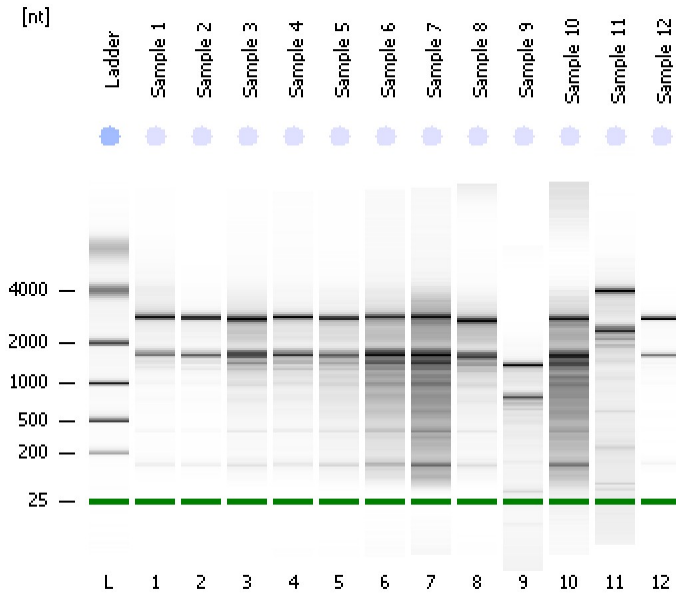


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

Electrophoresis File Run Summary



Instrument Information:

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

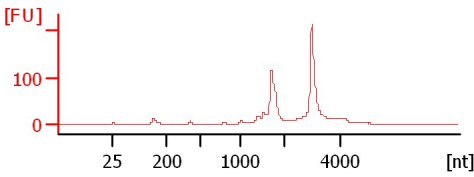
Assay Information:

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.

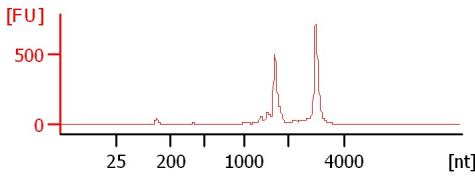
Chip Information:

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

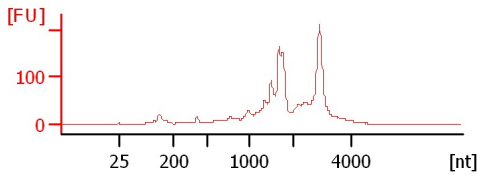
Sample 1  
RIN: 8.60



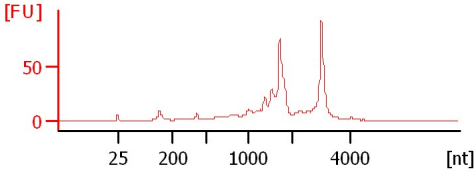
Sample 2  
RIN: 8.90



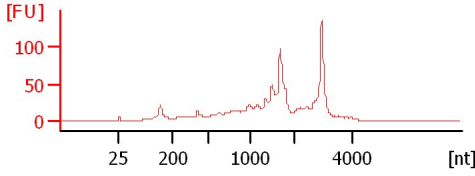
Sample 3  
RIN: 7.90



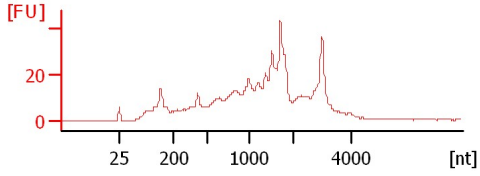
Sample 4  
RIN: 7.40



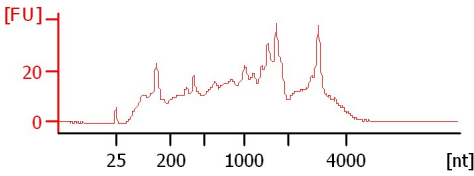
Sample 5  
RIN: 6.90



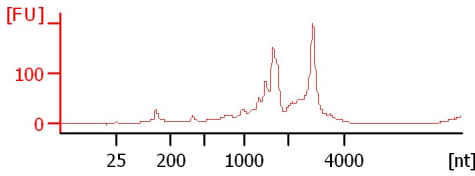
Sample 6  
RIN: 5.20



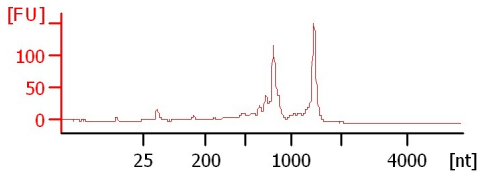
Sample 7  
RIN: 4.20



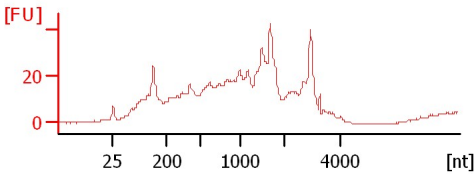
Sample 8  
RIN: 7.80



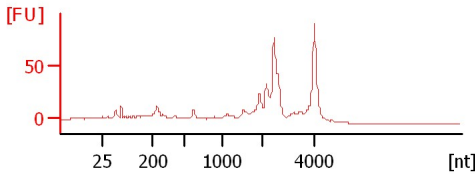
Sample 9  
RIN: 5.50



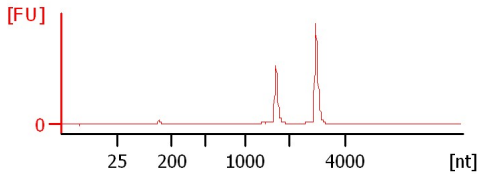
Sample 10  
RIN: 3.70



Sample 11  
RIN: 5.80



Sample 12  
RIN: 9.70



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 8.60	
Sample 2		✓	RIN: 8.90	
Sample 3		✓	RIN: 7.90	
Sample 4		✓	RIN: 7.40	
Sample 5		✓	RIN: 6.90	
Sample 6		✓	RIN: 5.20	
Sample 7		✓	RIN: 4.20	
Sample 8		✓	RIN: 7.80	
Sample 9		✓	RIN: 5.50	
Sample 10		✓	RIN: 3.70	
Sample 11		✓	RIN: 5.80	
Sample 12		✓	RIN: 9.70	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 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

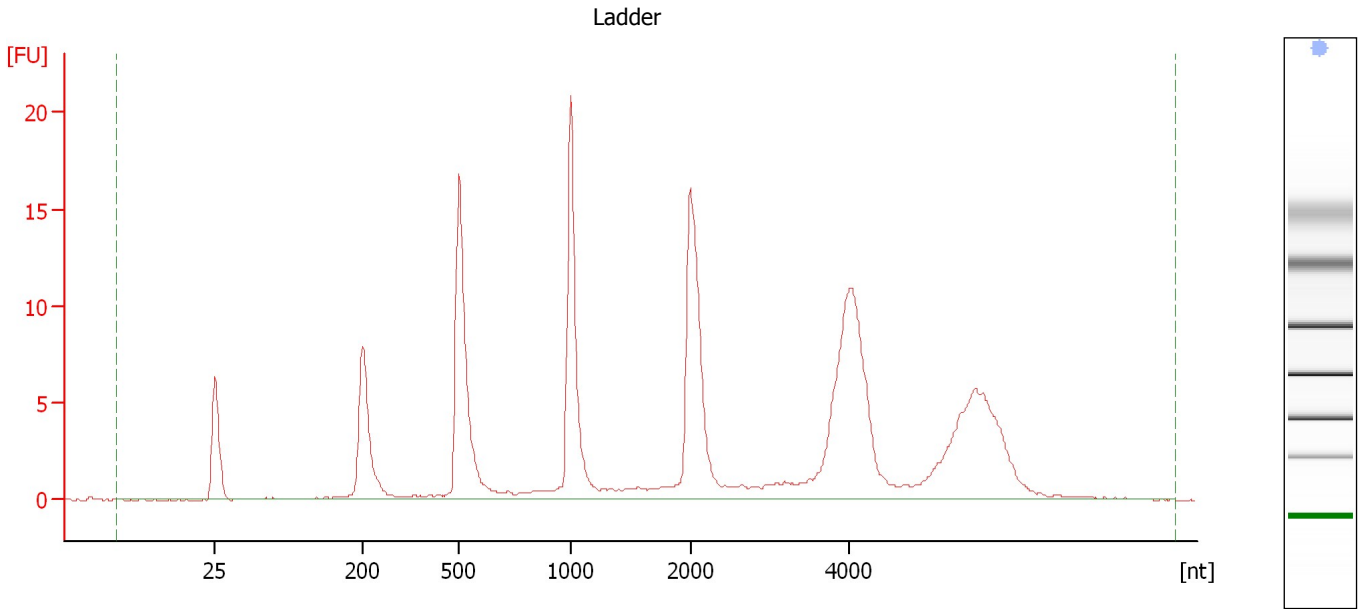
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary**



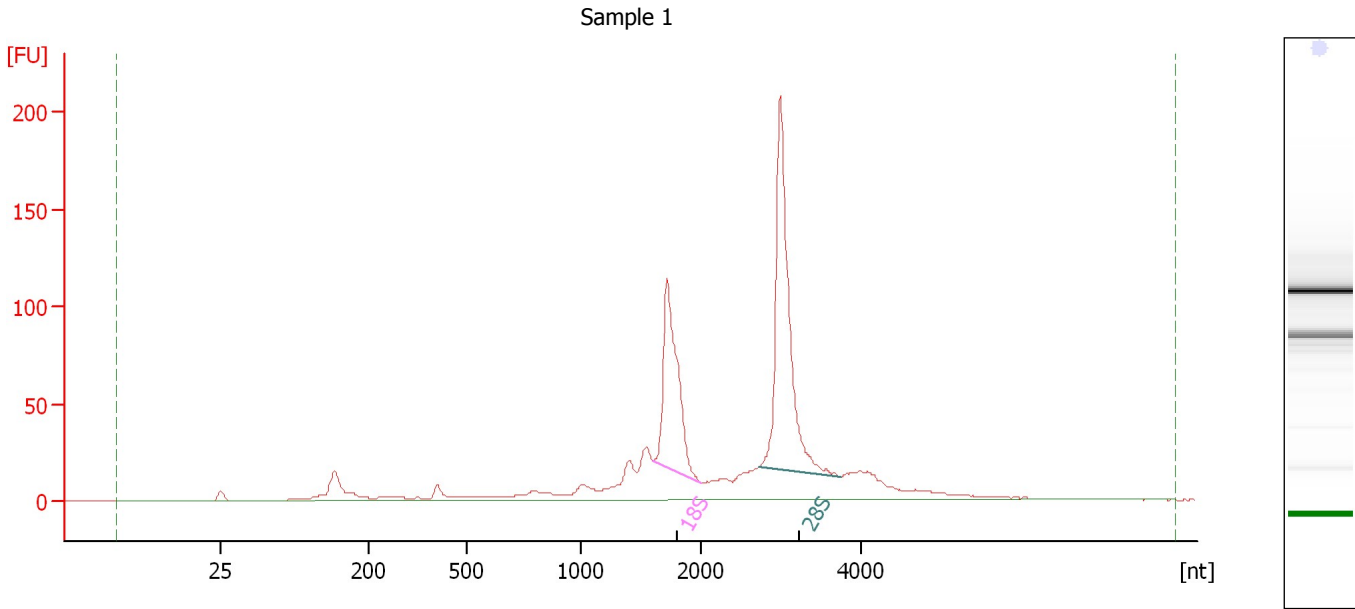
**Overall Results for Ladder**

RNA Area:	167.8	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\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	986.3	RNA Integrity Number (RIN):	8.6 (B.02.08)
RNA Concentration:	882 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: 8.60

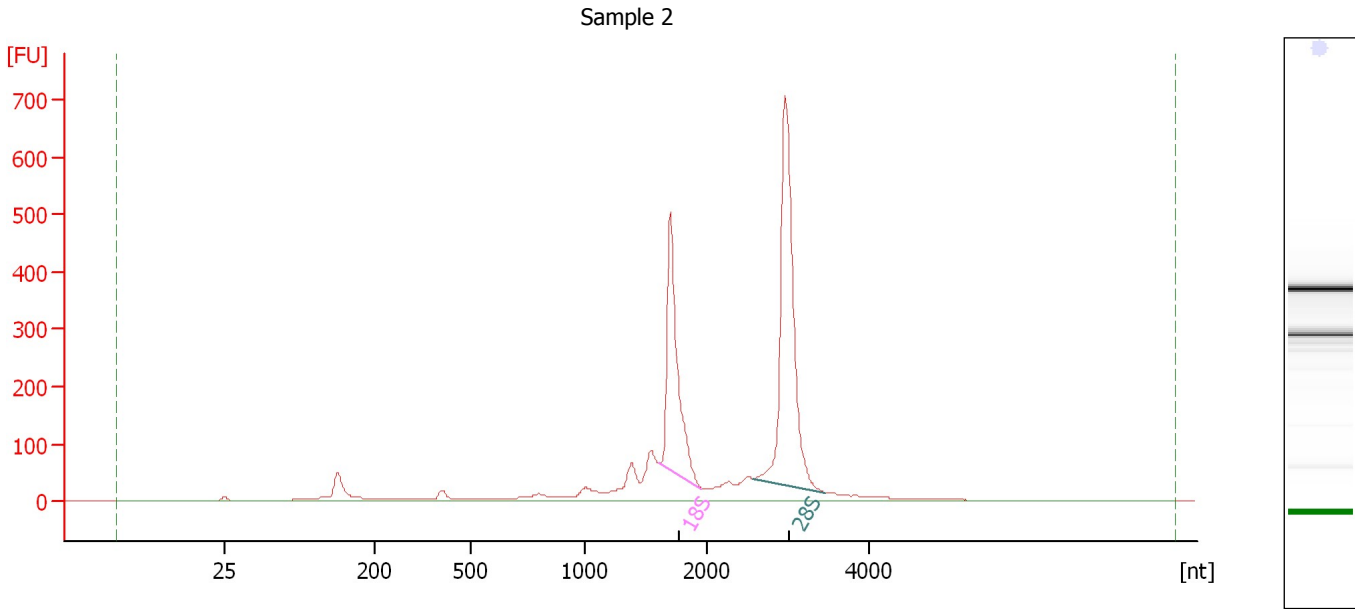
**Fragment table for sample 1 : Sample 1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,605	1,994	161.0	16.3
28S	2,722	3,732	267.5	27.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	2,612.1	RNA Integrity Number (RIN):	8.9 (B.02.08)
RNA Concentration:	2,335 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: 8.90

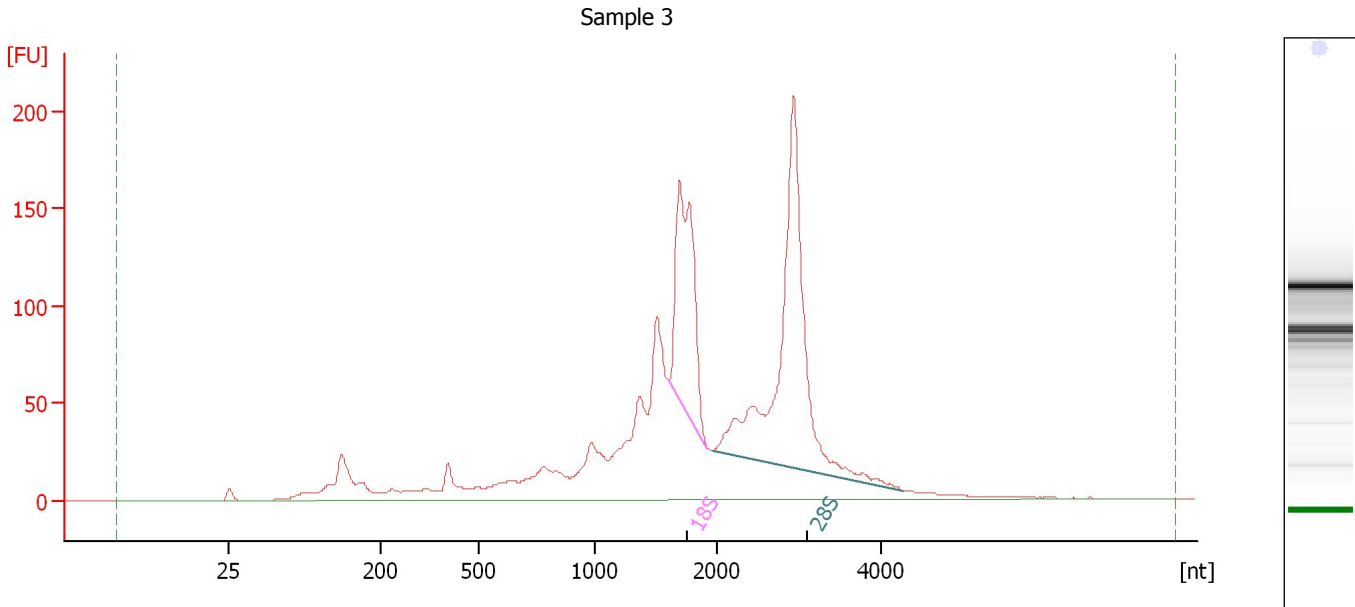
**Fragment table for sample 2 : Sample 2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,601	1,952	549.3	21.0
28S	2,562	3,447	894.7	34.3

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
 Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,893.3	RNA Integrity Number (RIN):	7.9 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,692 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]:	2.1	Result Flagging Label:	RIN: 7.90

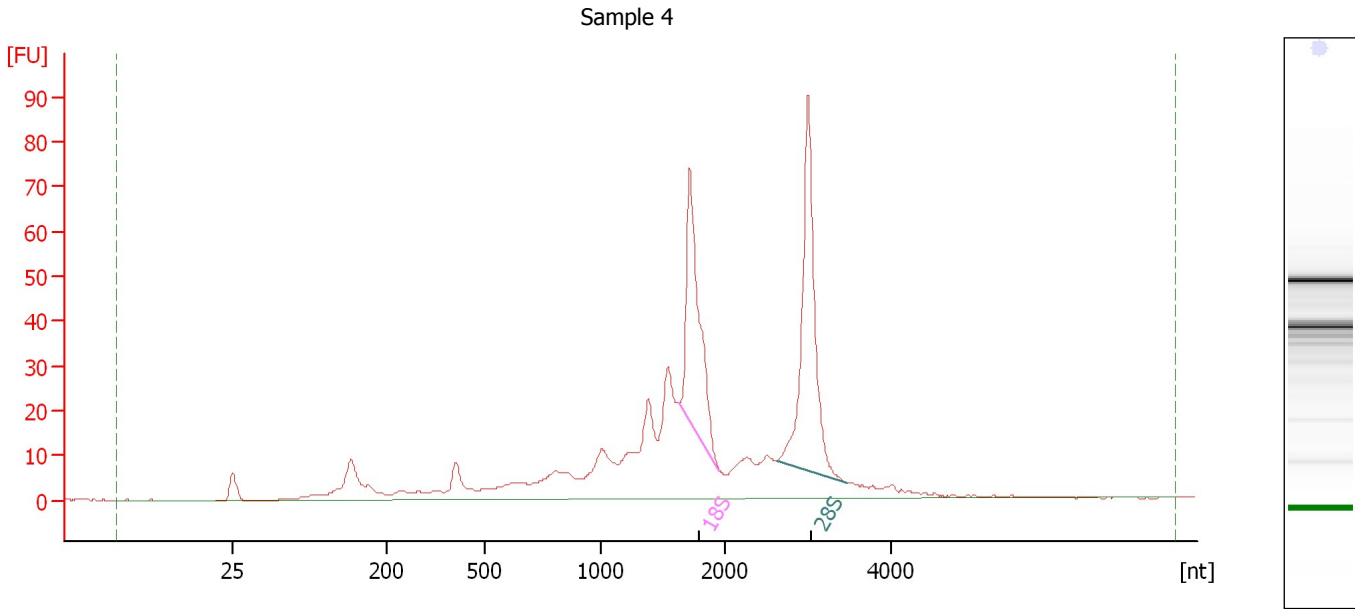
**Fragment table for sample 3 : Sample 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,608	1,921	233.5	12.3
28S	1,965	4,261	485.1	25.6

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
 Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	596.0	RNA Integrity Number (RIN):	7.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	533 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: 7.40

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

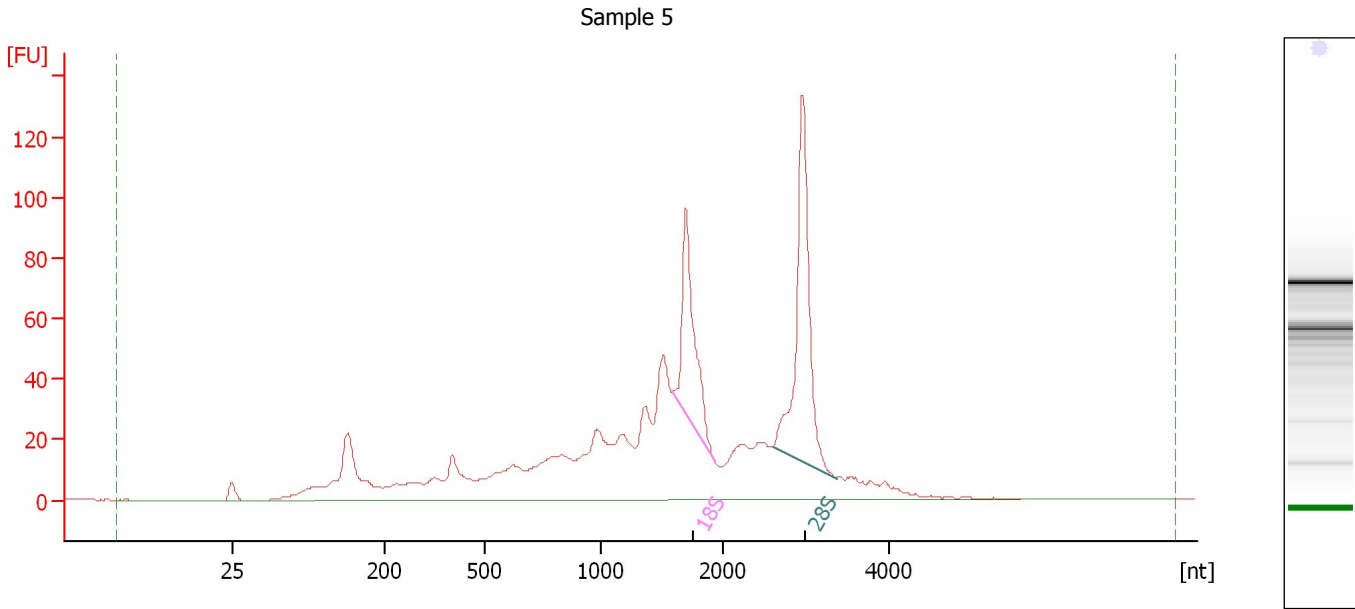
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,614	1,950	82.7	13.9
28S	2,626	3,469	108.9	18.3



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,122.0	RNA Integrity Number (RIN):	6.9 (B.02.08)
RNA Concentration:	1,003 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: 6.90

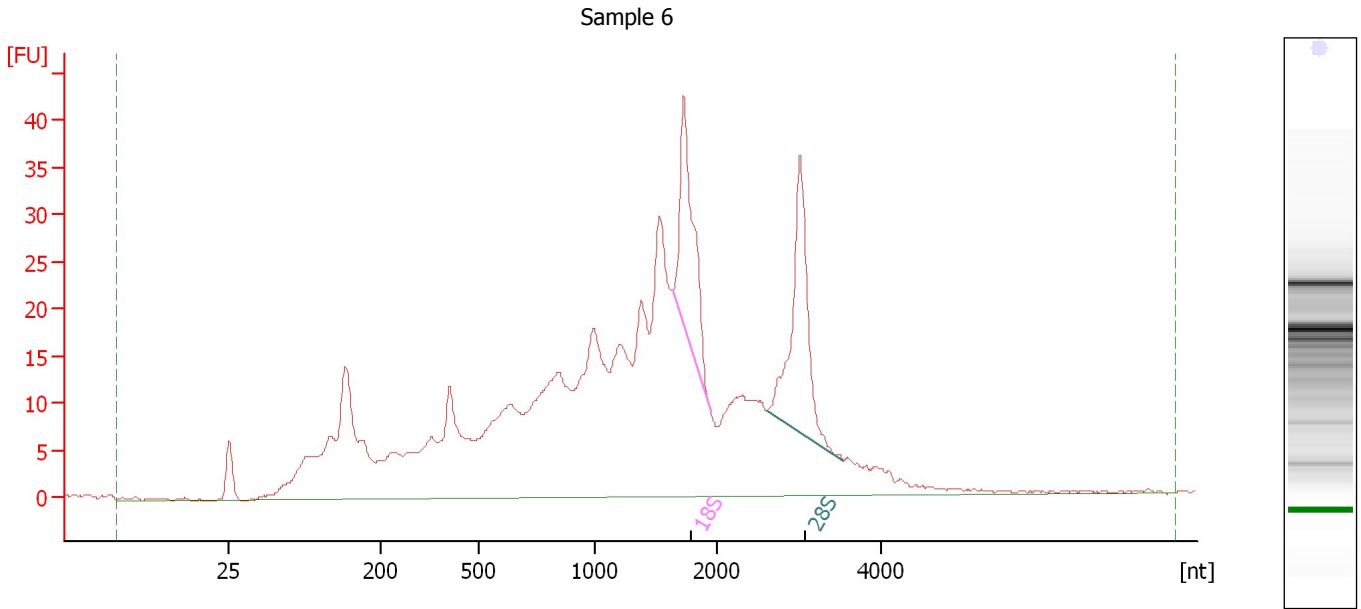
**Fragment table for sample 5 : Sample 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,587	1,924	97.2	8.7
28S	2,587	3,367	157.2	14.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	732.4	RNA Integrity Number (RIN):	5.2 (B.02.08)
RNA Concentration:	655 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: 5.20

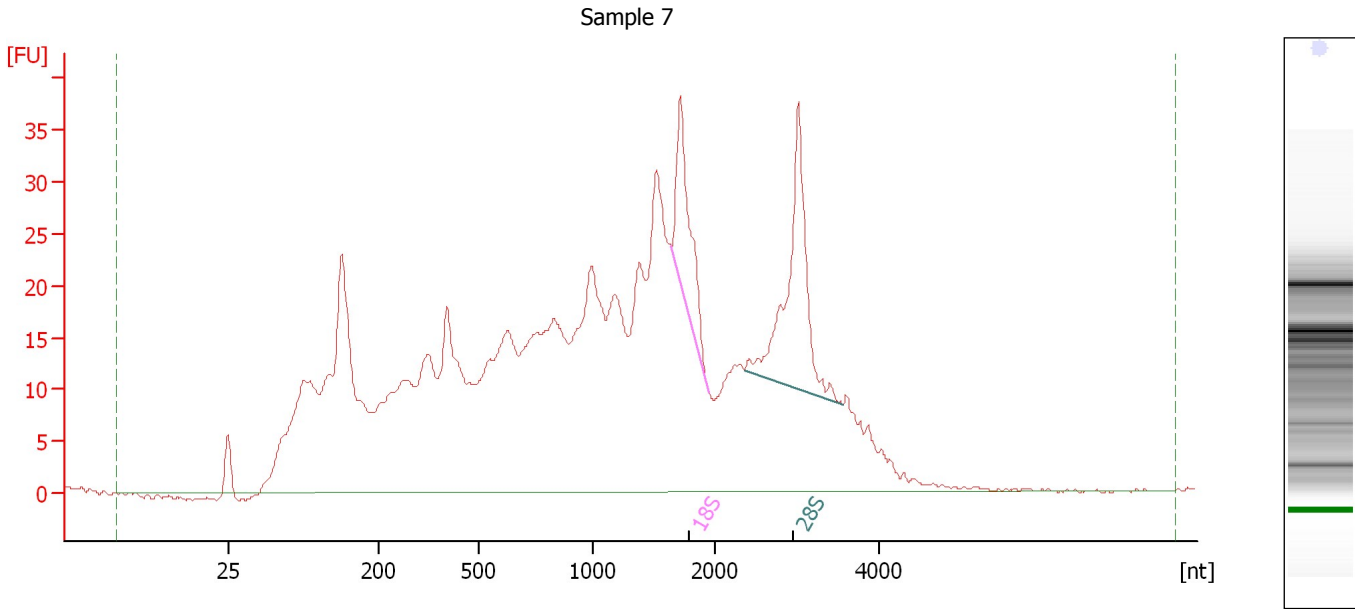
**Fragment table for sample 6 : Sample 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	1,939	39.4	5.4
28S	2,614	3,542	47.0	6.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,002.1	RNA Integrity Number (RIN):	4.2 (B.02.08)
RNA Concentration:	896 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: 4.20

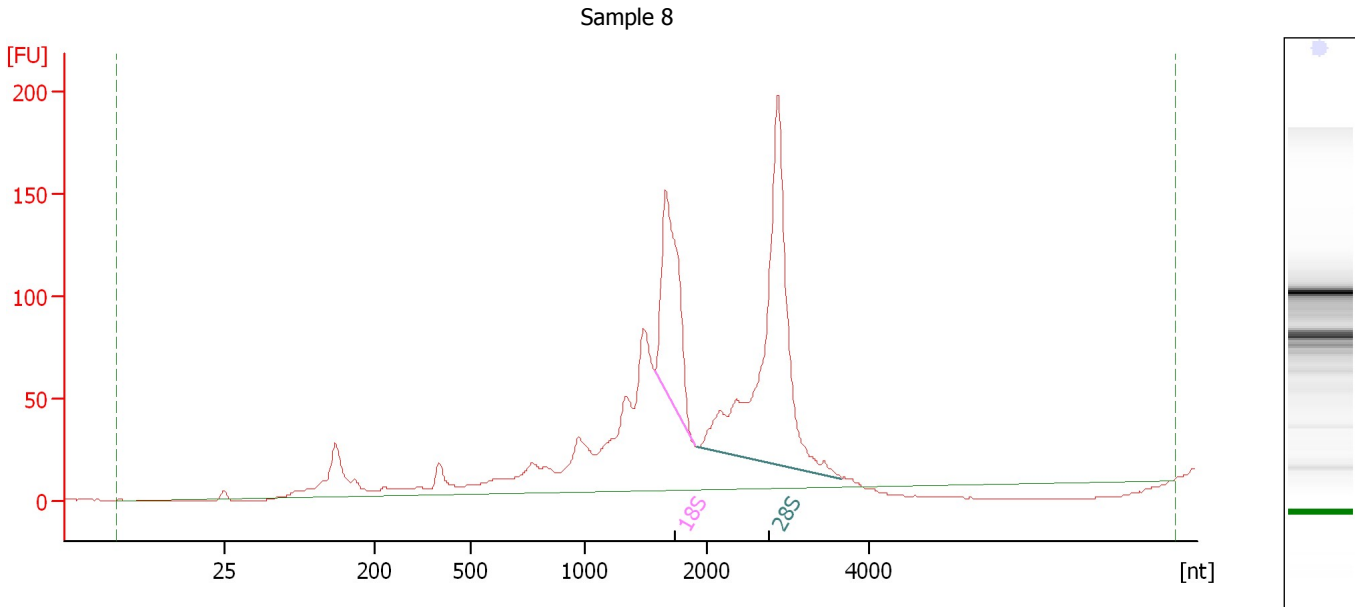
**Fragment table for sample 7 : Sample 7**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,642	1,947	28.0	2.8
28S	2,352	3,557	52.3	5.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
 Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,596.4	RNA Integrity Number (RIN):	7.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,427 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]:	2.3	Result Flagging Label:	RIN: 7.80

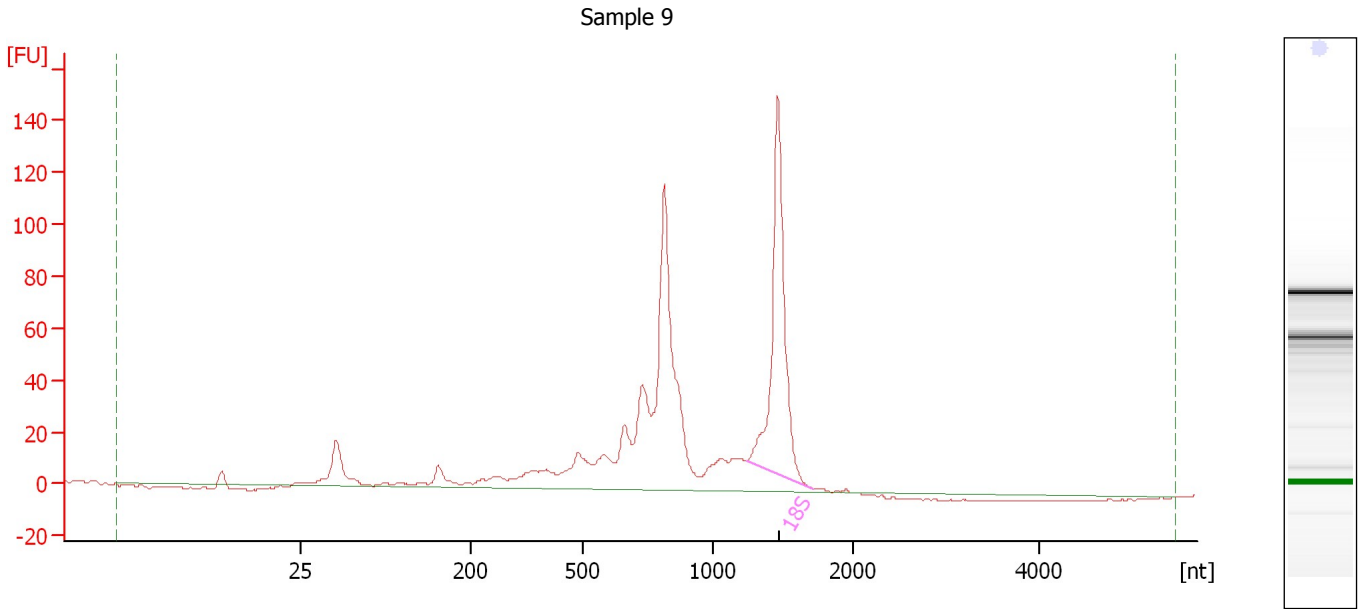
**Fragment table for sample 8 : Sample 8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,566	1,891	203.6	12.8
28S	1,917	3,658	467.3	29.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	790.3	RNA Integrity Number (RIN):	5.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	706 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: 5.50

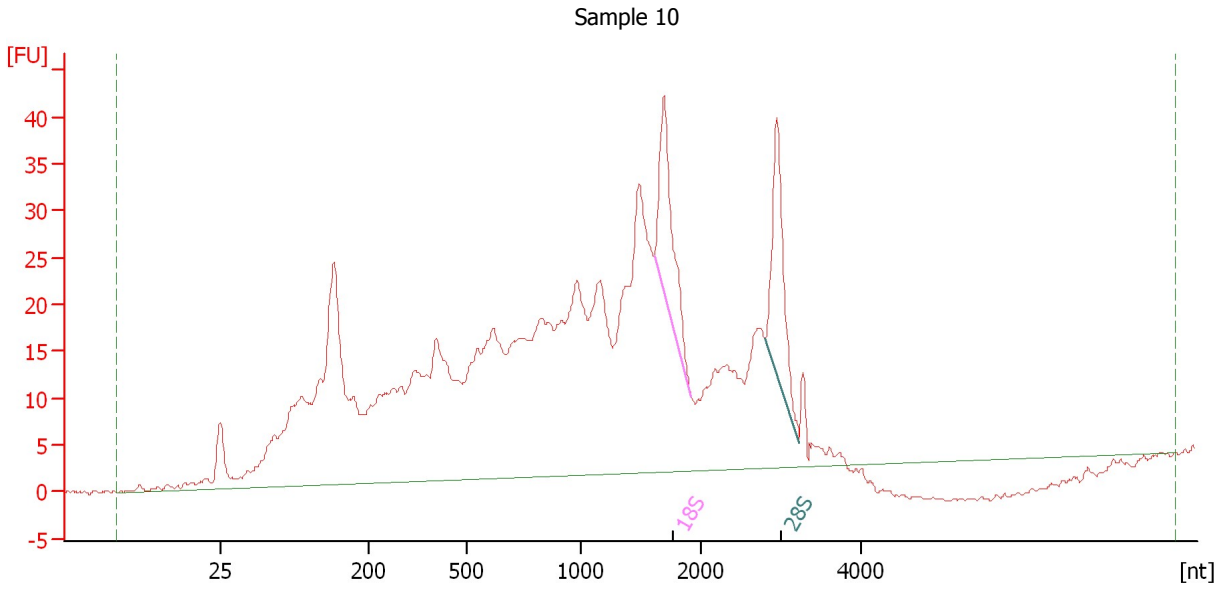
**Fragment table for sample 9 : Sample 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,233	1,708	191.3	24.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
 Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	932.9	RNA Integrity Number (RIN):	3.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	834 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: 3.70

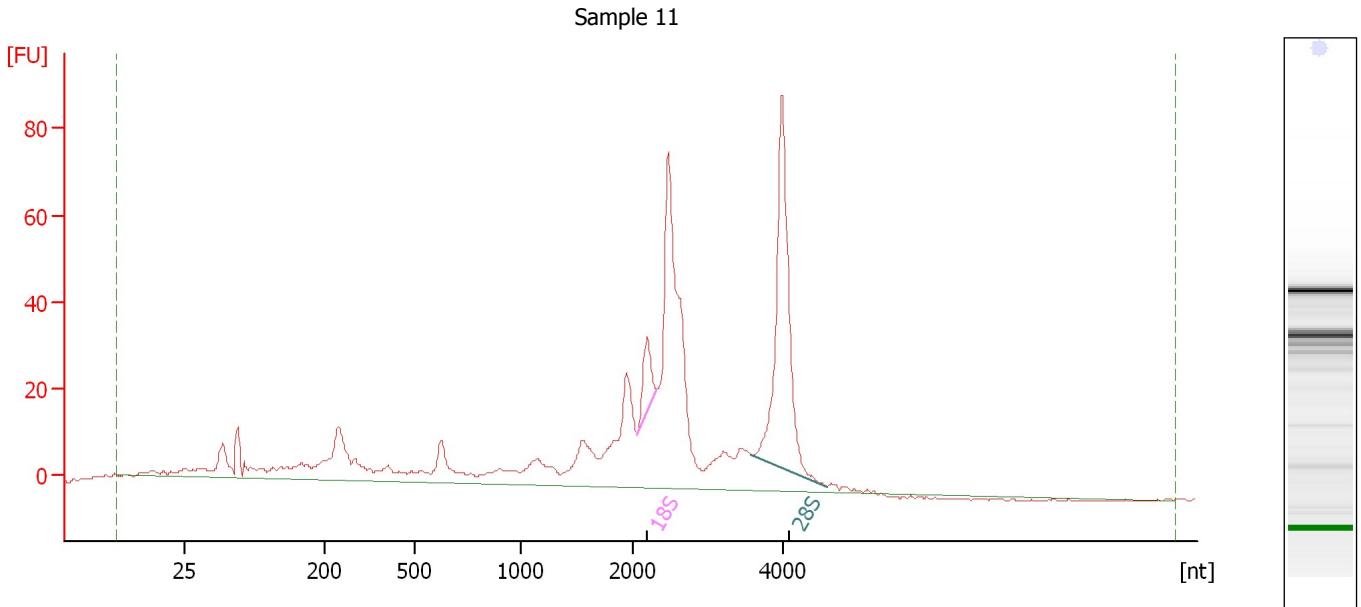
**Fragment table for sample 10 : Sample 10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,614	1,923	31.8	3.4
28S	2,802	3,227	32.4	3.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
 Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	660.2	RNA Integrity Number (RIN):	5.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	590 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]:	7.4	Result Flagging Label:	RIN: 5.80

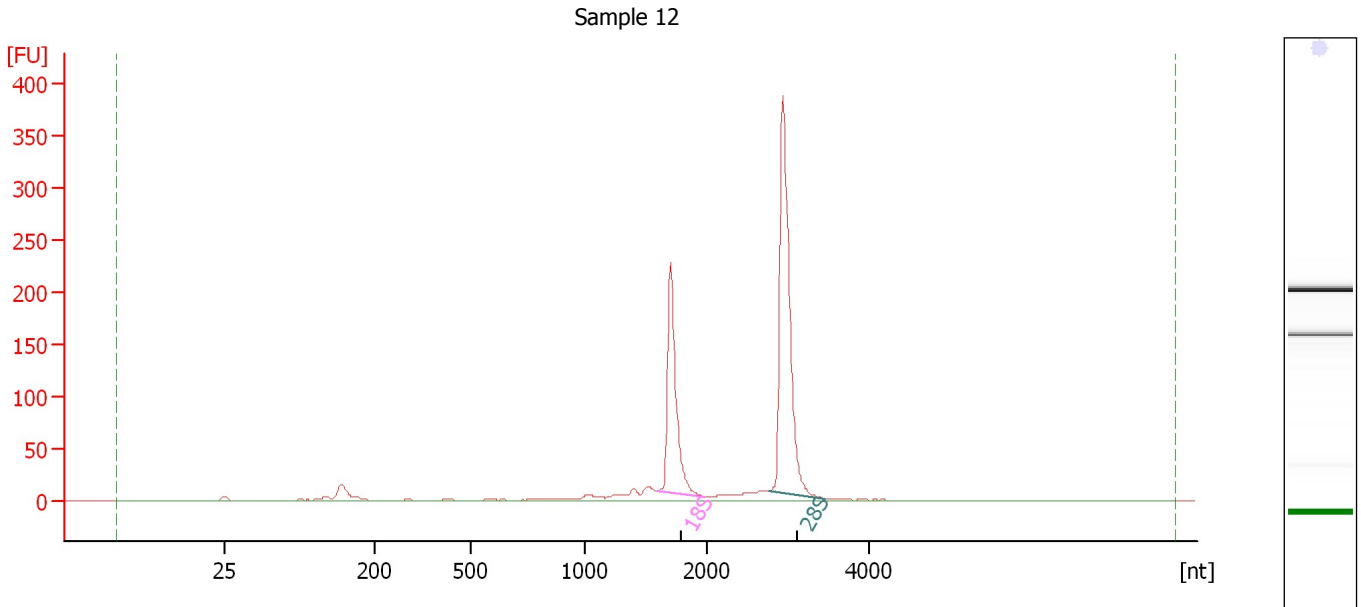
**Fragment table for sample 11 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,054	2,311	15.6	2.4
28S	3,579	4,577	115.4	17.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area: 861.3      RNA Integrity Number (RIN): 9.7 (B.02.08)  
RNA Concentration: 770 ng/μl      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.8      Result Flagging Label: RIN: 9.70

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

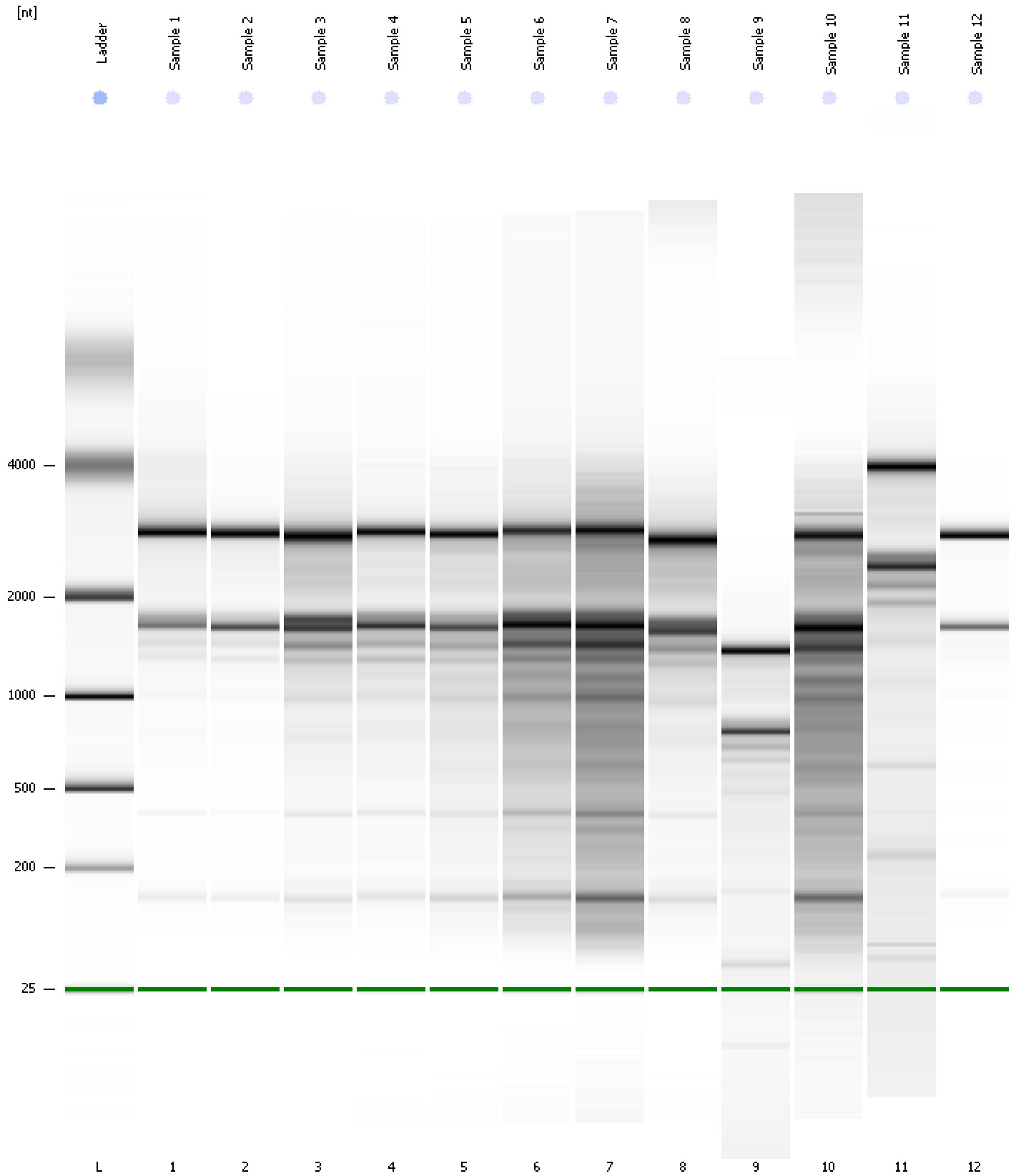
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,583	1,979	220.2	25.6
28S	2,773	3,447	386.0	44.8



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Gel Image**

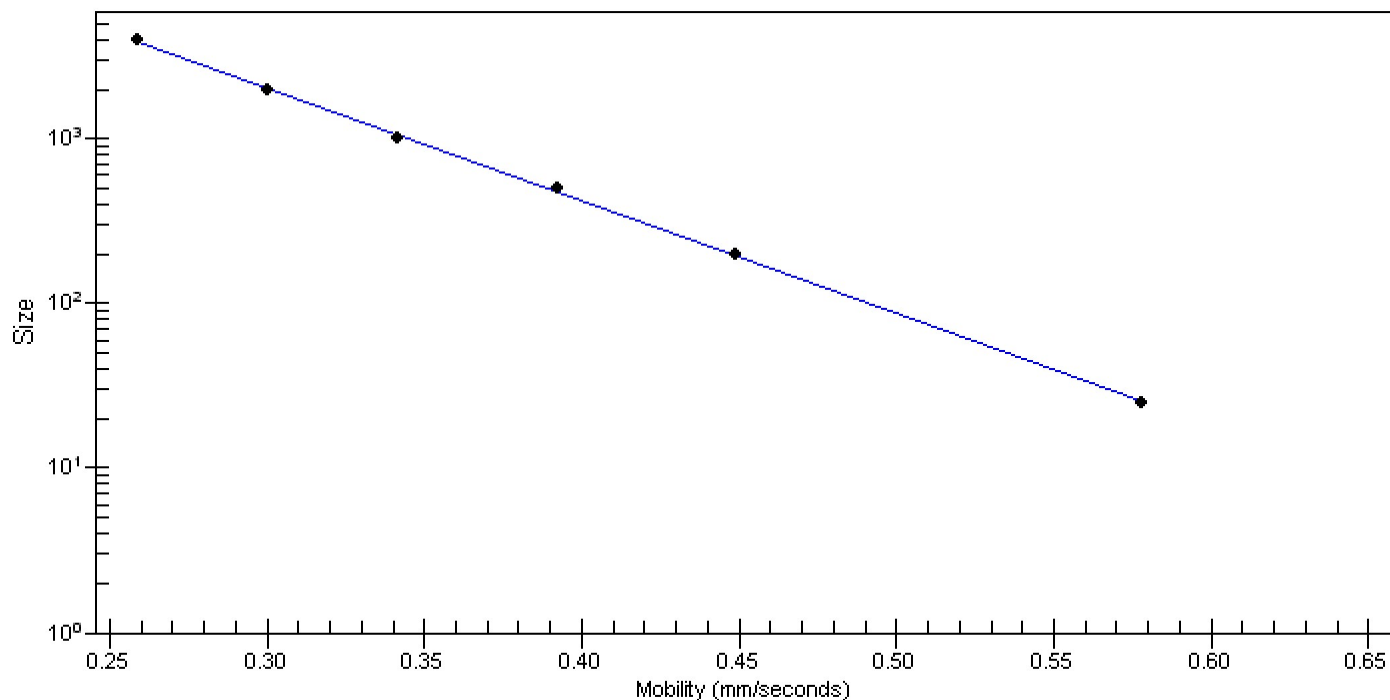


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
Modified: 7/30/2014 11:03:11 AM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-30\2014-07-30\_001.xad

Created: 7/30/2014 10:38:02 AM  
 Modified: 7/30/2014 11:03:11 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		7/30/2014 11:01:53 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\2014-07-30\2014-07-30_001.xad)		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/30/2014 10:38:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1