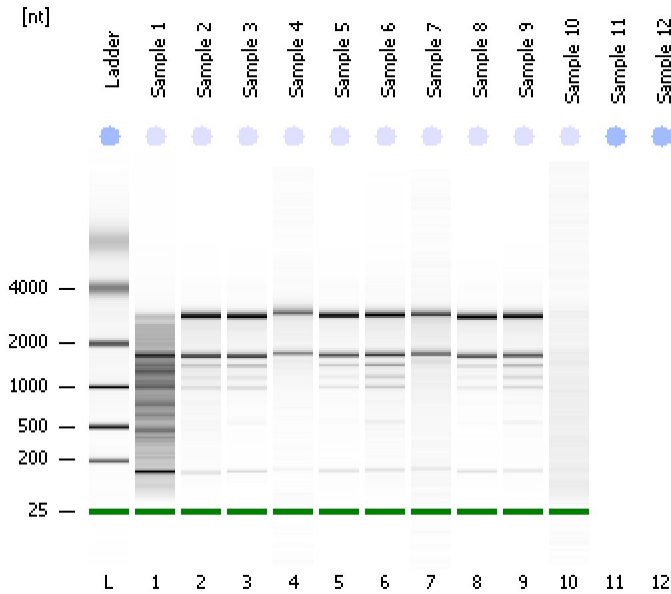


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

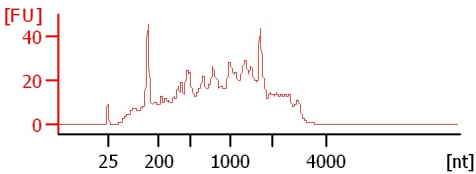
Assay Information:

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.

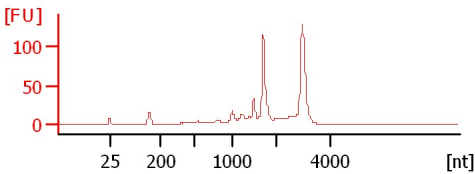
Chip Information:

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

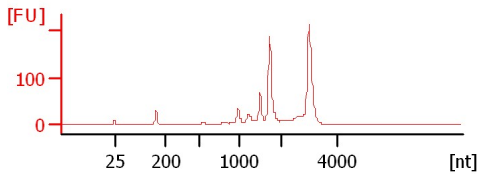
**Sample 1**  
RIN: 3.20



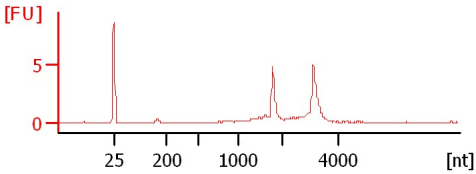
**Sample 2**  
RIN: 7.50



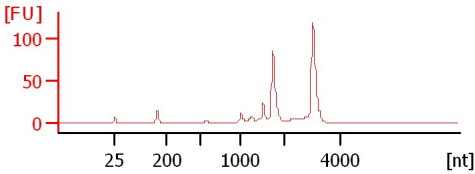
**Sample 3**  
RIN: 8



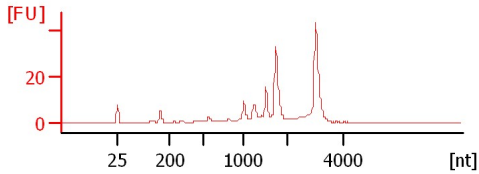
**Sample 4**  
RIN: 8.80



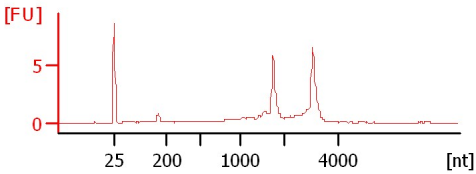
**Sample 5**  
RIN: 8.60



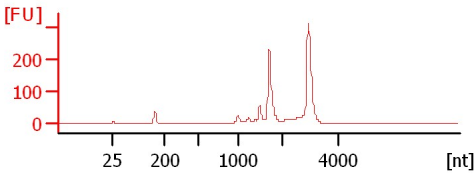
**Sample 6**  
RIN: 7.50



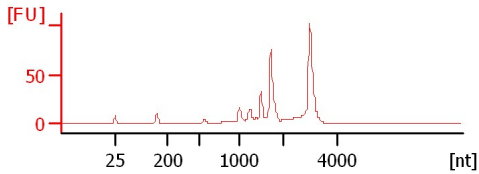
**Sample 7**  
RIN: 7.70



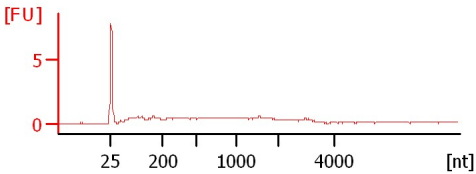
**Sample 8**  
RIN: 8.90



**Sample 9**  
RIN: 8



**Sample 10**  
RIN: 1



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 3.20	
Sample 2		✓	RIN: 7.50	
Sample 3		✓	RIN:8	
Sample 4		✓	RIN: 8.80	
Sample 5		✓	RIN: 8.60	
Sample 6		✓	RIN: 7.50	
Sample 7		✓	RIN: 7.70	
Sample 8		✓	RIN: 8.90	
Sample 9		✓	RIN:8	
Sample 10		✓	RIN:1	
Sample 11				
Sample 12				
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 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/ $\mu$ 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

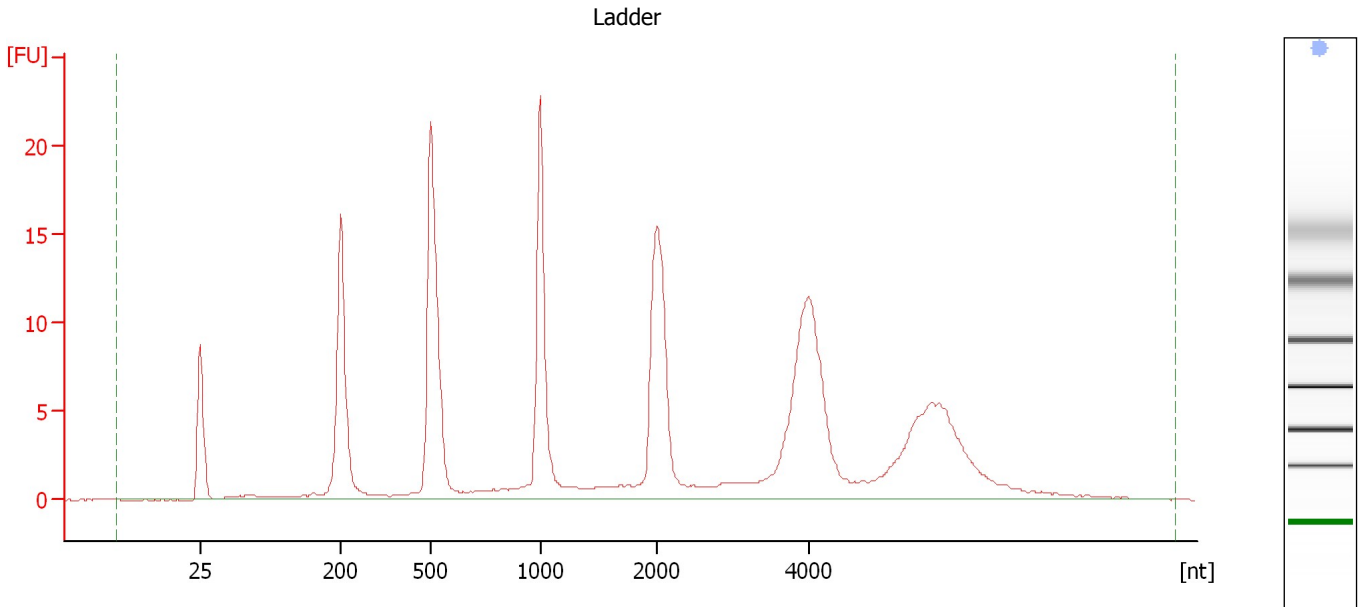
### Ladder

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\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary**



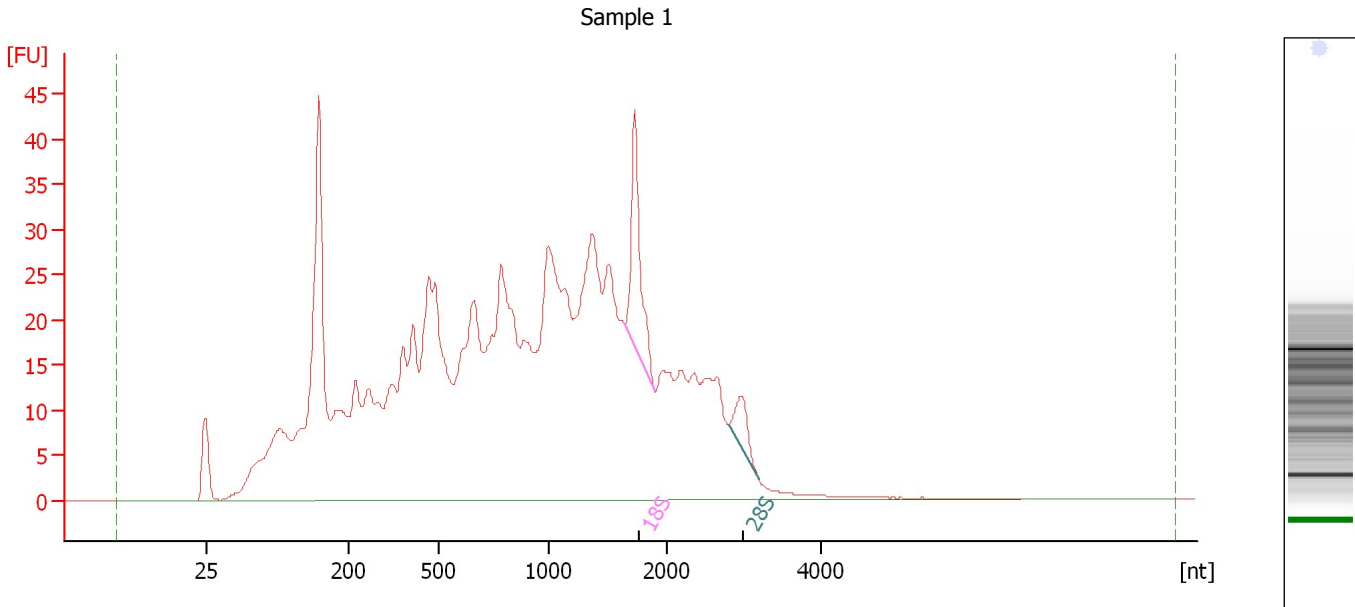
**Overall Results for Ladder**

RNA Area:	212.0	Result Flagging Color:	<span style="background-color: blue; 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\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,033.7	RNA Integrity Number (RIN):	3.2 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	731 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: 3.20

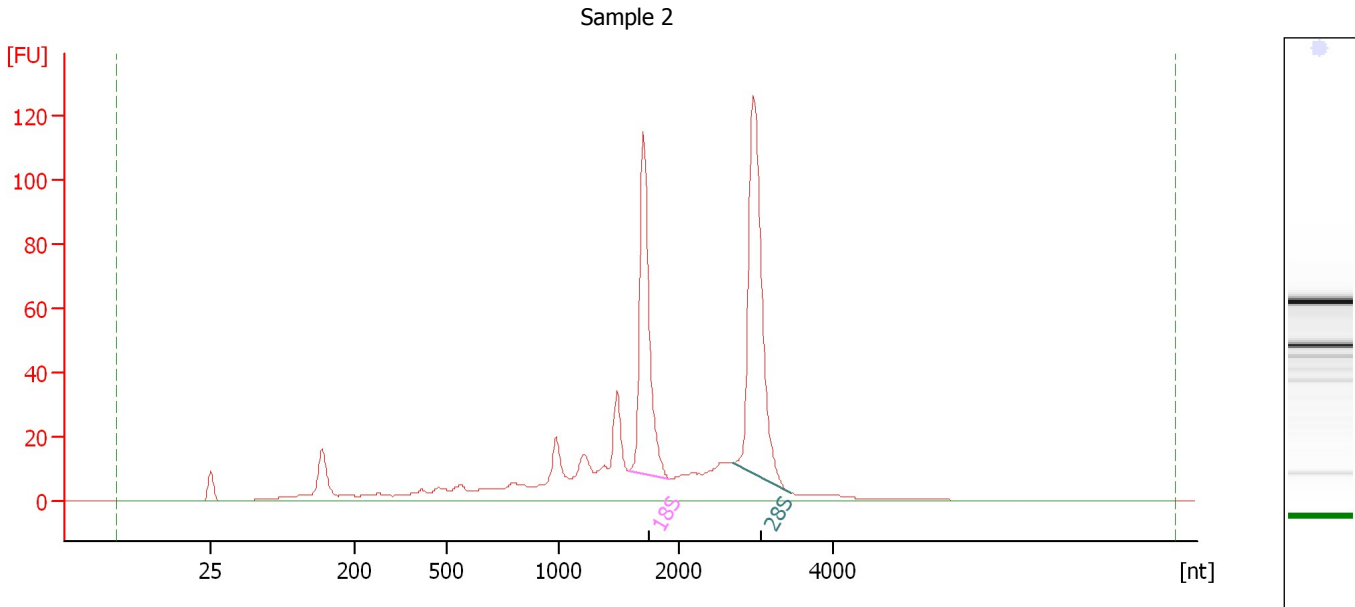
**Fragment table for sample 1 : Sample 1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,635	1,886	28.8	2.8
28S	2,791	3,184	8.0	0.8

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	690.9	RNA Integrity Number (RIN):	7.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	489 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: 7.50

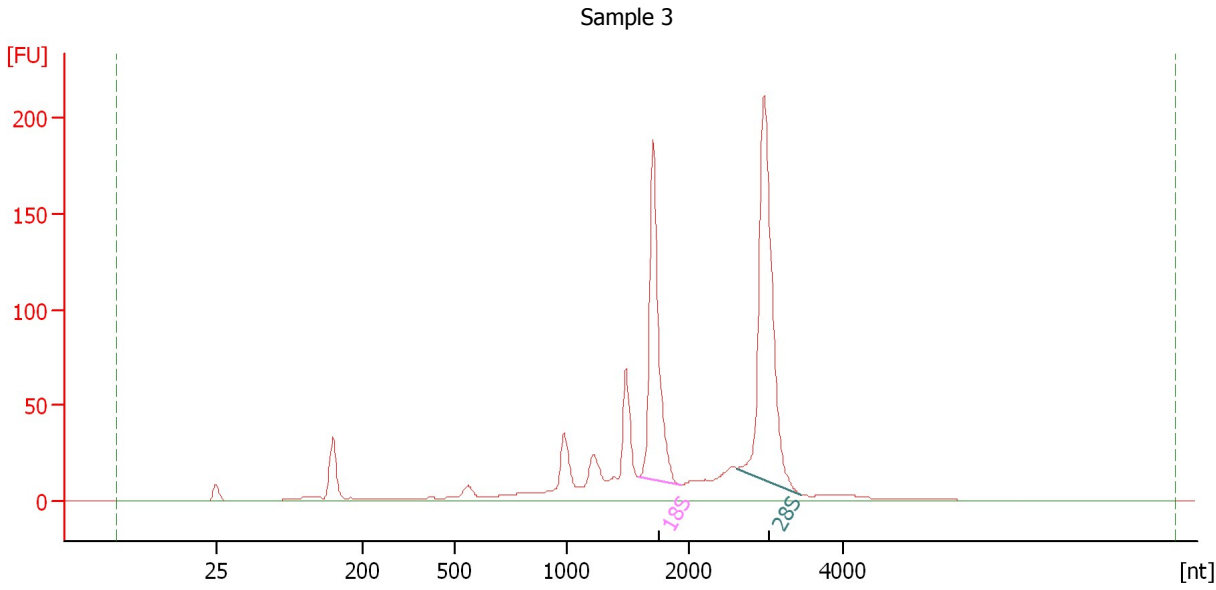
**Fragment table for sample 2 : Sample 2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,589	1,927	119.8	17.3
28S	2,706	3,470	170.1	24.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area: 994.1                      RNA Integrity Number (RIN): 8 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 703 ng/μl  
rRNA Ratio [28s / 18s]: 1.4  
Result Flagging Color:   
Result Flagging Label: RIN:8

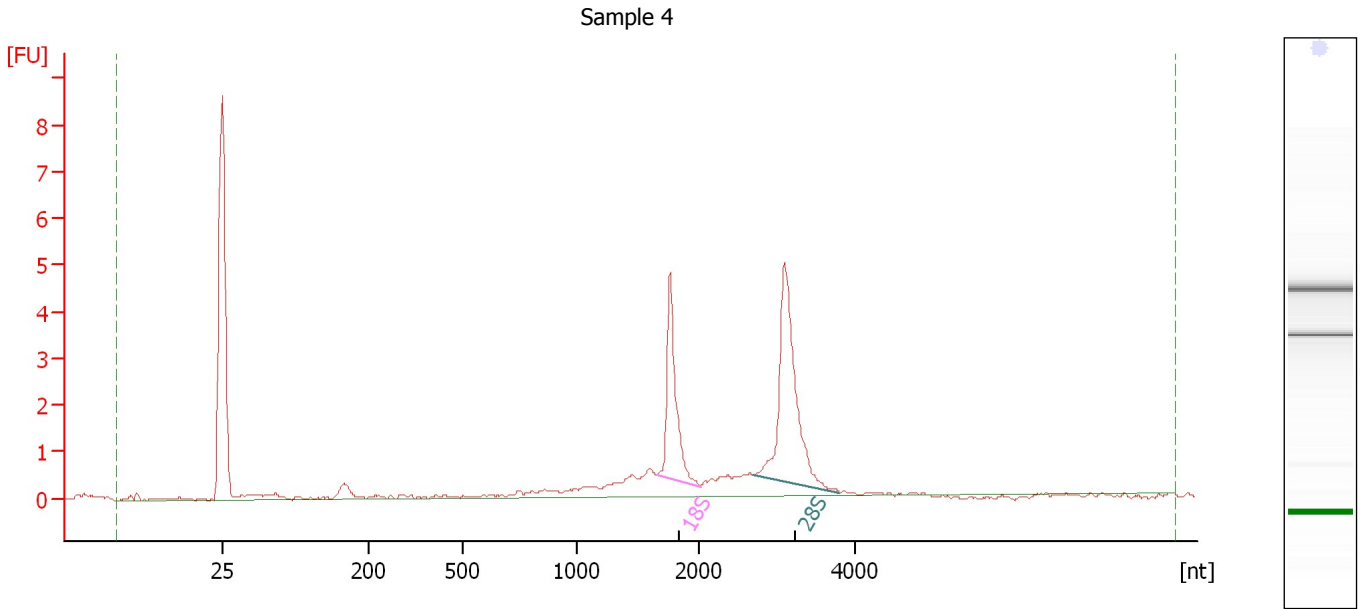
**Fragment table for sample 3 : Sample 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,588	1,932	199.1	20.0
28S	2,636	3,446	288.0	29.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	25.9	RNA Integrity Number (RIN):	8.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	18 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: 8.80

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

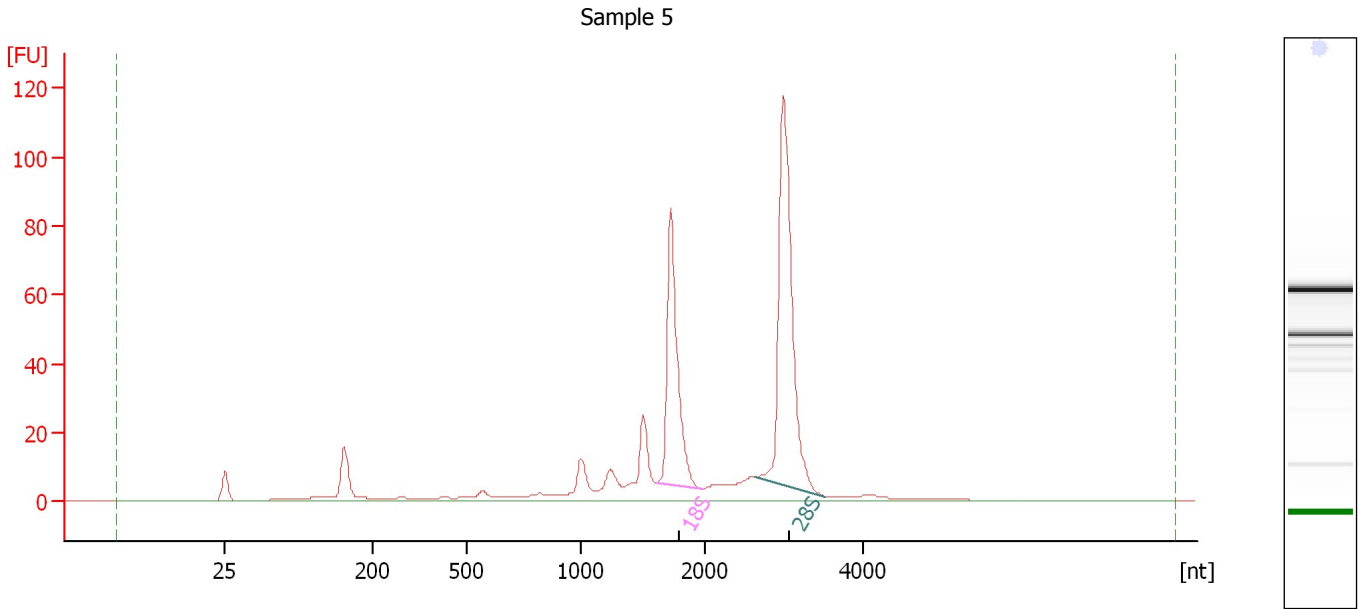
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,657	2,023	4.6	17.8
28S	2,703	3,791	8.0	31.1



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	476.9	RNA Integrity Number (RIN):	8.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	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]:	1.6	Result Flagging Label:	RIN: 8.60

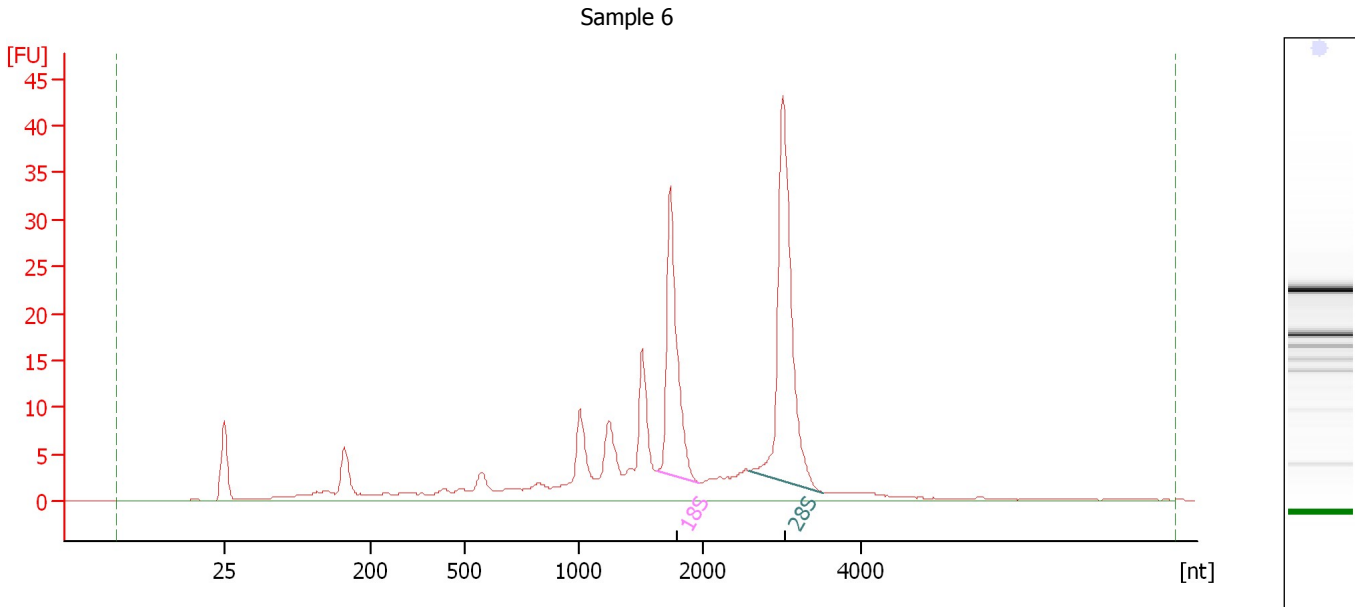
**Fragment table for sample 5 : Sample 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,609	1,982	97.3	20.4
28S	2,634	3,513	157.7	33.1

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	239.6	RNA Integrity Number (RIN):	7.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	170 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: 7.50

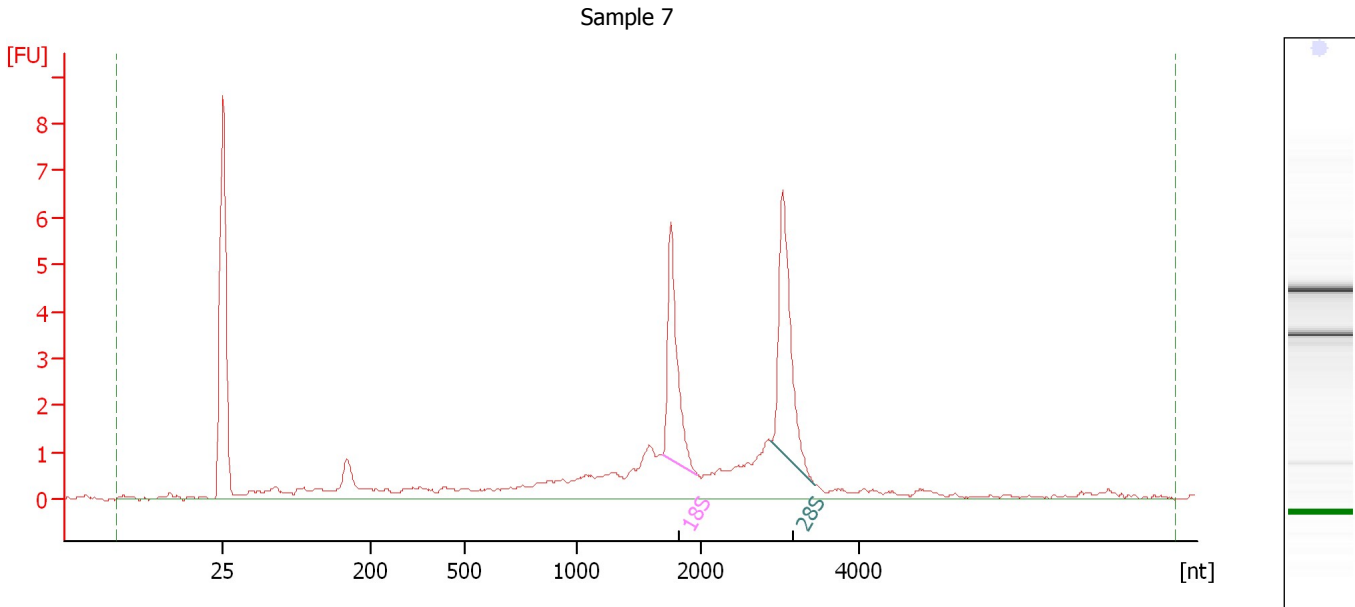
**Fragment table for sample 6 : Sample 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,634	1,972	37.2	15.5
28S	2,594	3,529	58.1	24.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	44.6	RNA Integrity Number (RIN):	7.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	32 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: 7.70

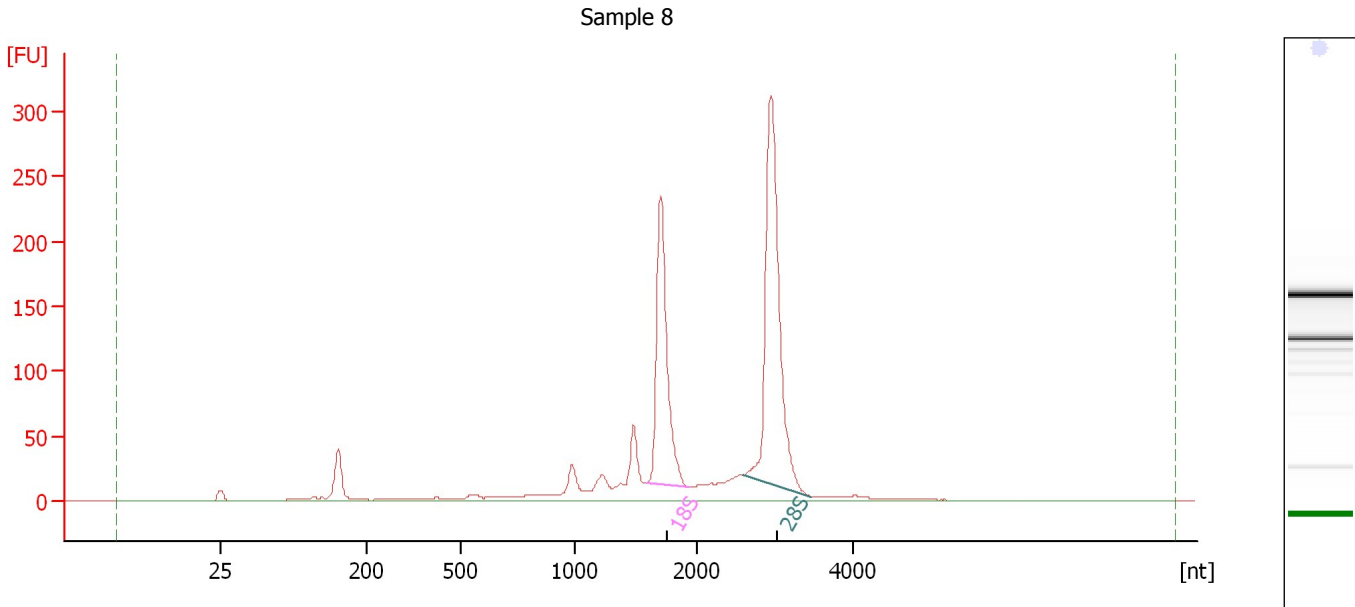
**Fragment table for sample 7 : Sample 7**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,684	1,972	5.6	12.6
28S	2,893	3,449	6.9	15.6

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,245.2	RNA Integrity Number (RIN):	8.9 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	881 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

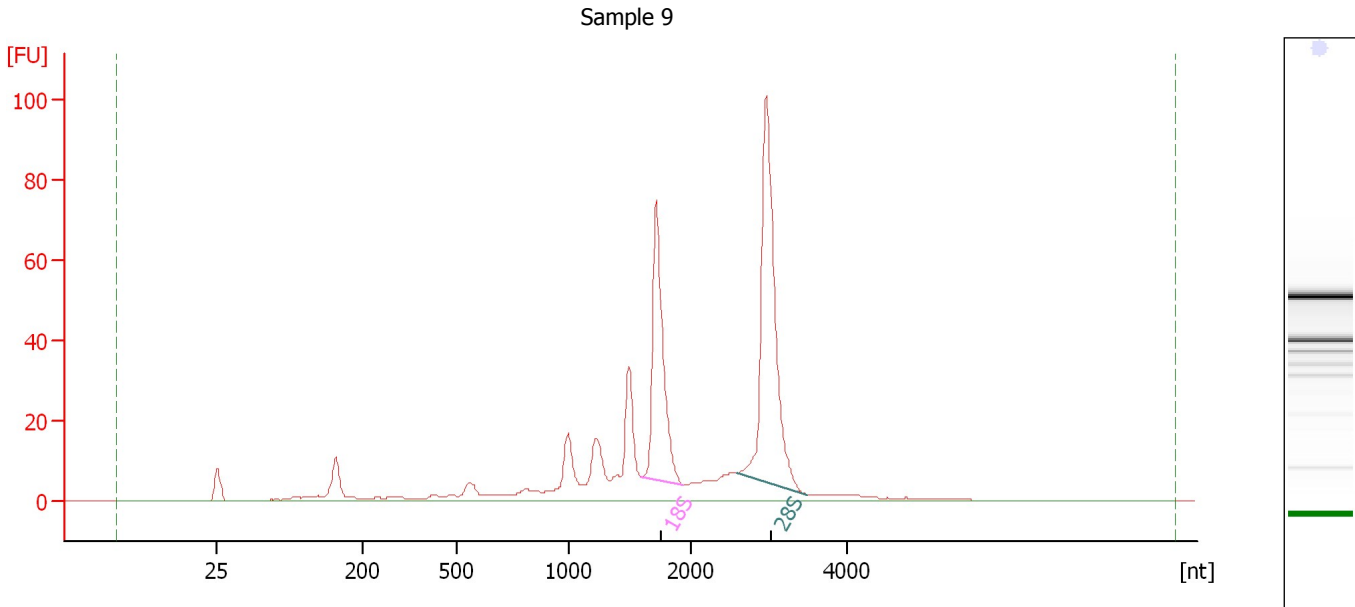
**Fragment table for sample 8 : Sample 8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,586	1,935	270.6	21.7
28S	2,581	3,467	432.3	34.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	480.4	RNA Integrity Number (RIN):	8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	340 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

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

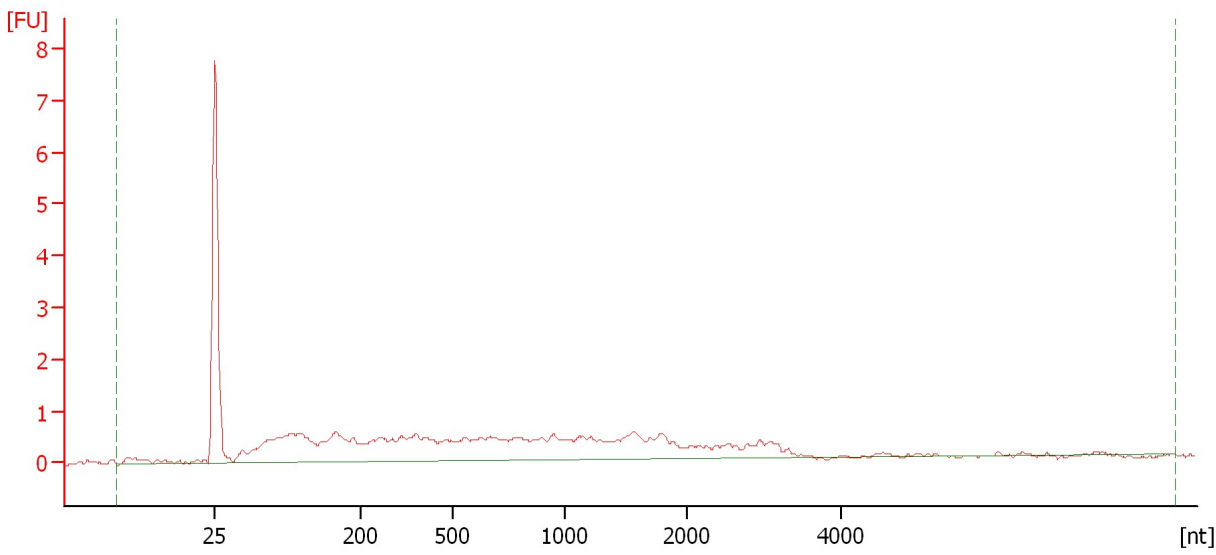
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,598	1,941	86.0	17.9
28S	2,608	3,500	138.7	28.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Electropherogram Summary Continued ...**

Sample 10



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

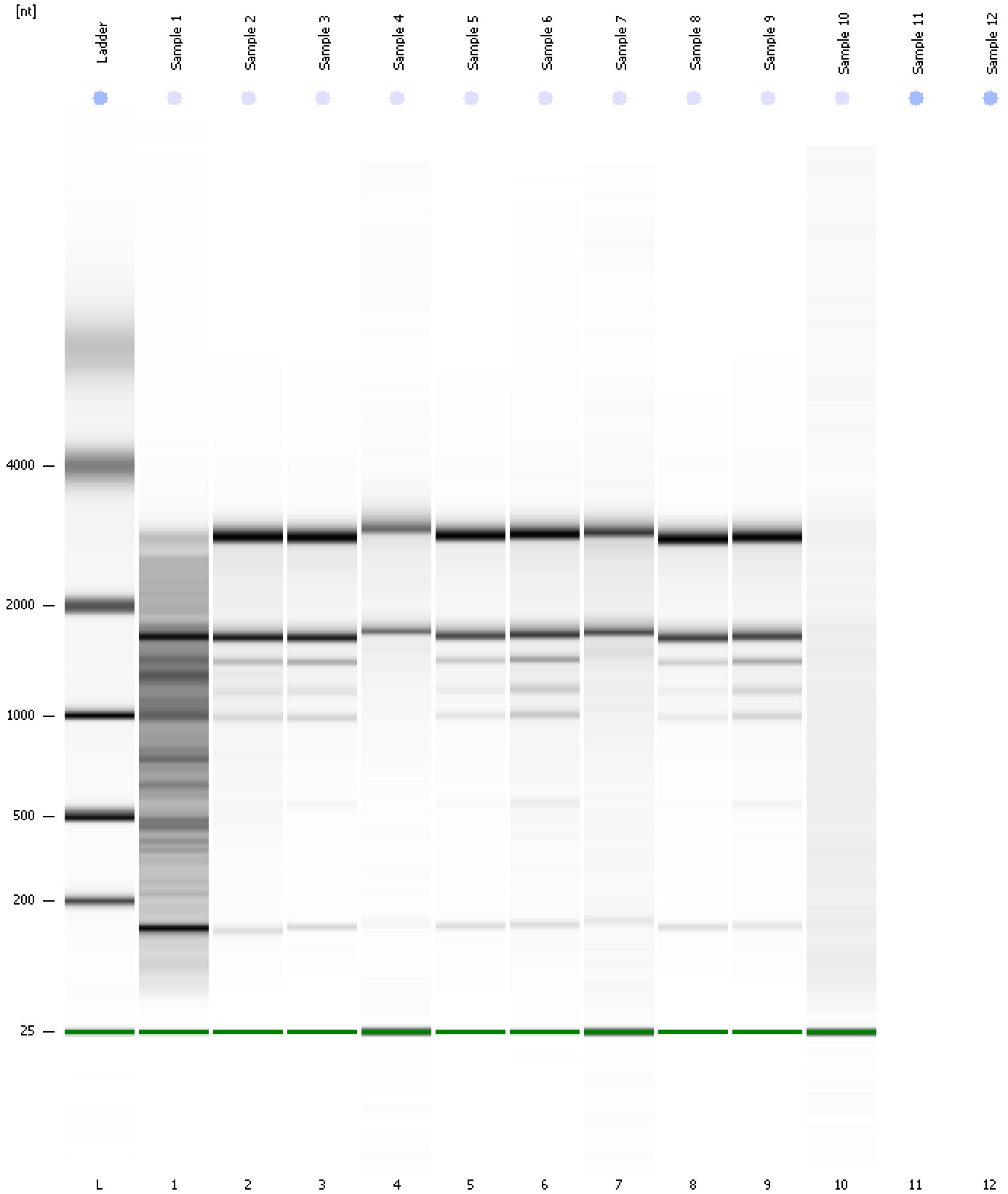
RNA Area: 28.3  
RNA Concentration: 20 ng/μl  
rRNA Ratio [28s / 18s]: 0.0

RNA Integrity Number (RIN): 1 (B.02.08, Anomaly Threshold(s) manually adapted)  
Result Flagging Color:   
Result Flagging Label: RIN:1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Gel Image**



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Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
Modified: 7/16/2014 4:27:57 PM

**Invalid Samples**

Sample 11 has not been run, no results available.

Sample 12 has not been run, no results available.



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-16\2014-07-16\_005.xad

Created: 7/16/2014 4:01:11 PM  
 Modified: 7/16/2014 4:27:57 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		7/16/2014 4:22:13 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\2014-07-16\2014-07-16_005.xad)		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/16/2014 4:01:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1