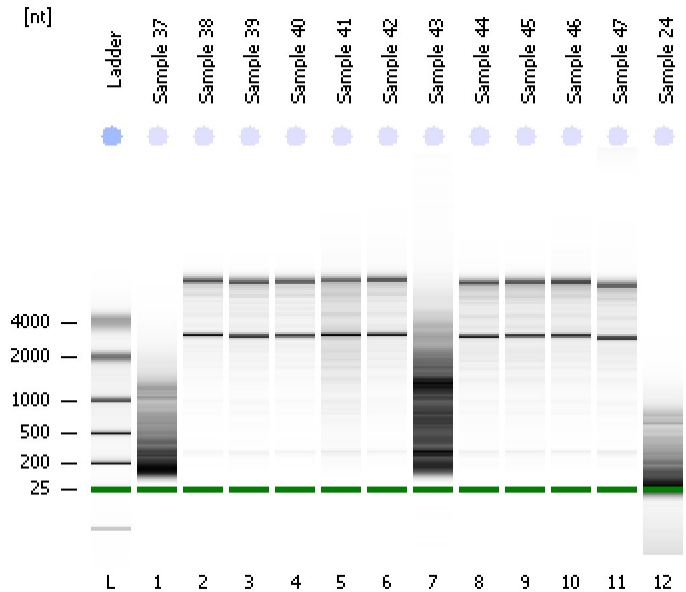


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

Electrophoresis File Run Summary



Instrument Information:

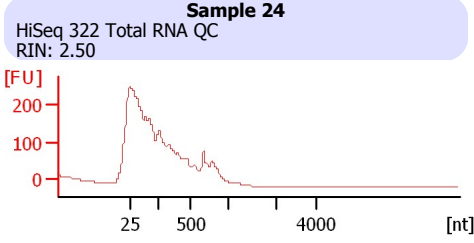
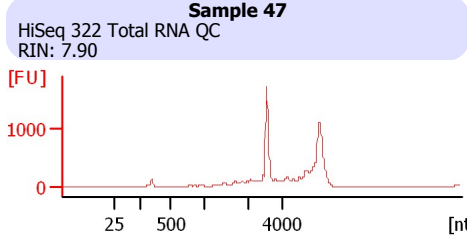
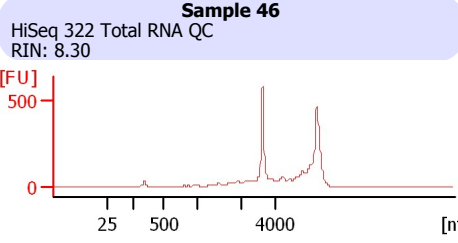
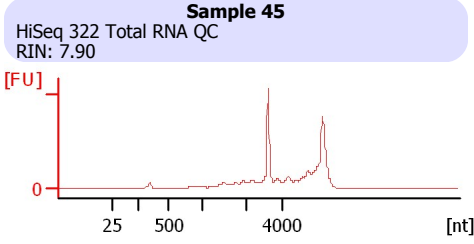
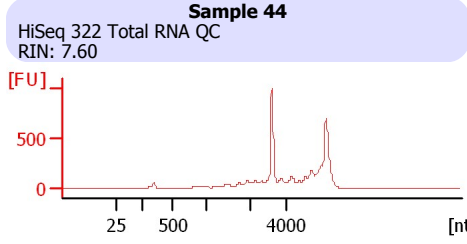
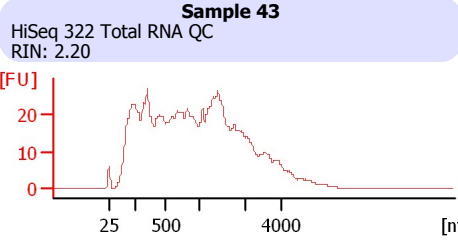
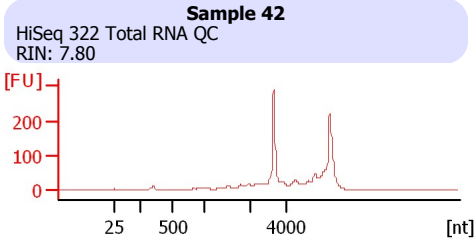
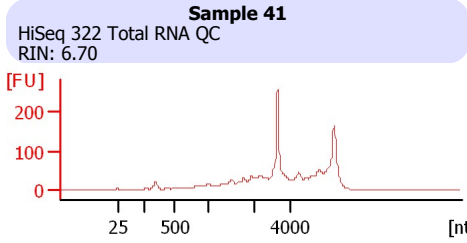
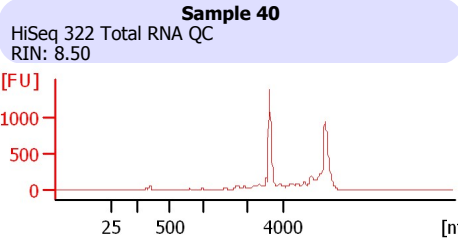
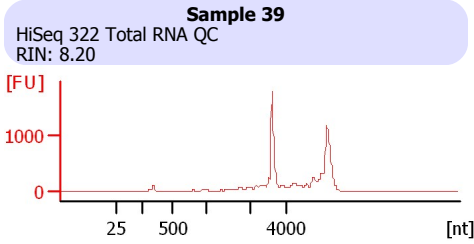
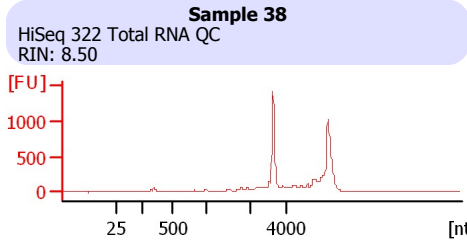
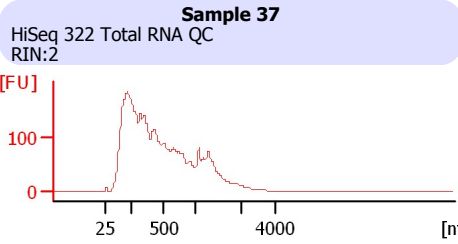
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 37	HiSeq 322 Total RNA QC	✓	RIN:2	
Sample 38	HiSeq 322 Total RNA QC	✓	RIN: 8.50	
Sample 39	HiSeq 322 Total RNA QC	✓	RIN: 8.20	
Sample 40	HiSeq 322 Total RNA QC	✓	RIN: 8.50	
Sample 41	HiSeq 322 Total RNA QC	✓	RIN: 6.70	
Sample 42	HiSeq 322 Total RNA QC	✓	RIN: 7.80	
Sample 43	HiSeq 322 Total RNA QC	✓	RIN: 2.20	
Sample 44	HiSeq 322 Total RNA QC	✓	RIN: 7.60	
Sample 45	HiSeq 322 Total RNA QC	✓	RIN: 7.90	
Sample 46	HiSeq 322 Total RNA QC	✓	RIN: 8.30	
Sample 47	HiSeq 322 Total RNA QC	✓	RIN: 7.90	
Sample 24	HiSeq 322 Total RNA QC	✓	RIN: 2.50	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 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

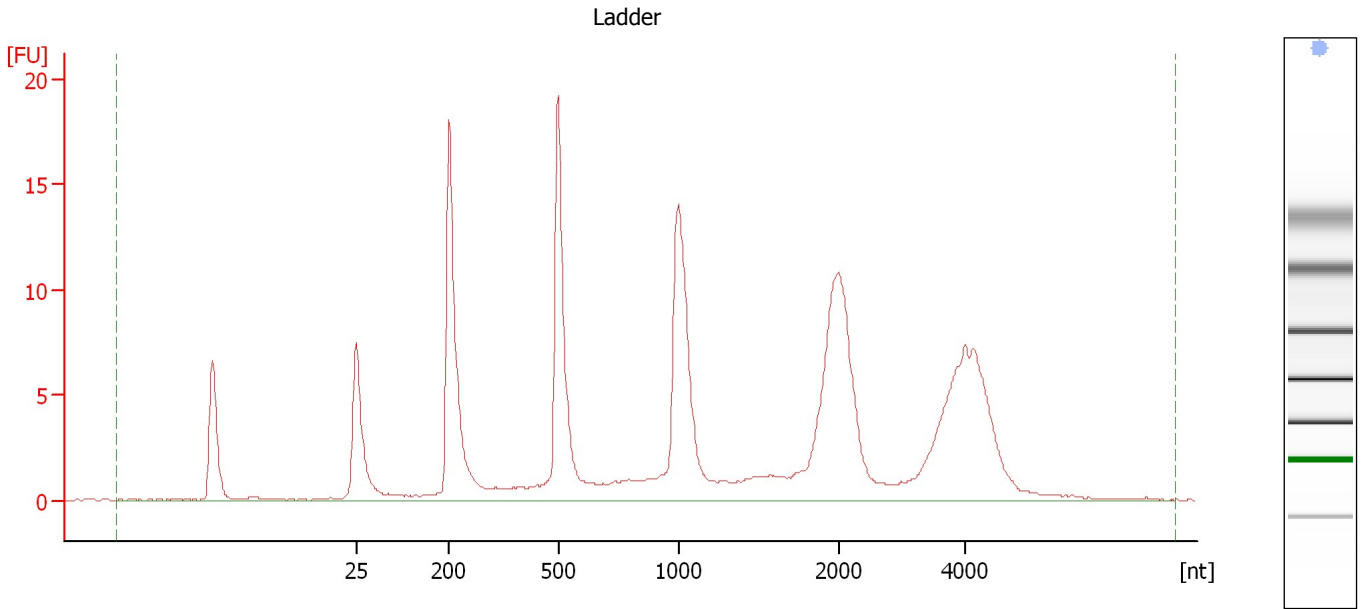
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary**



**Overall Results for Ladder**

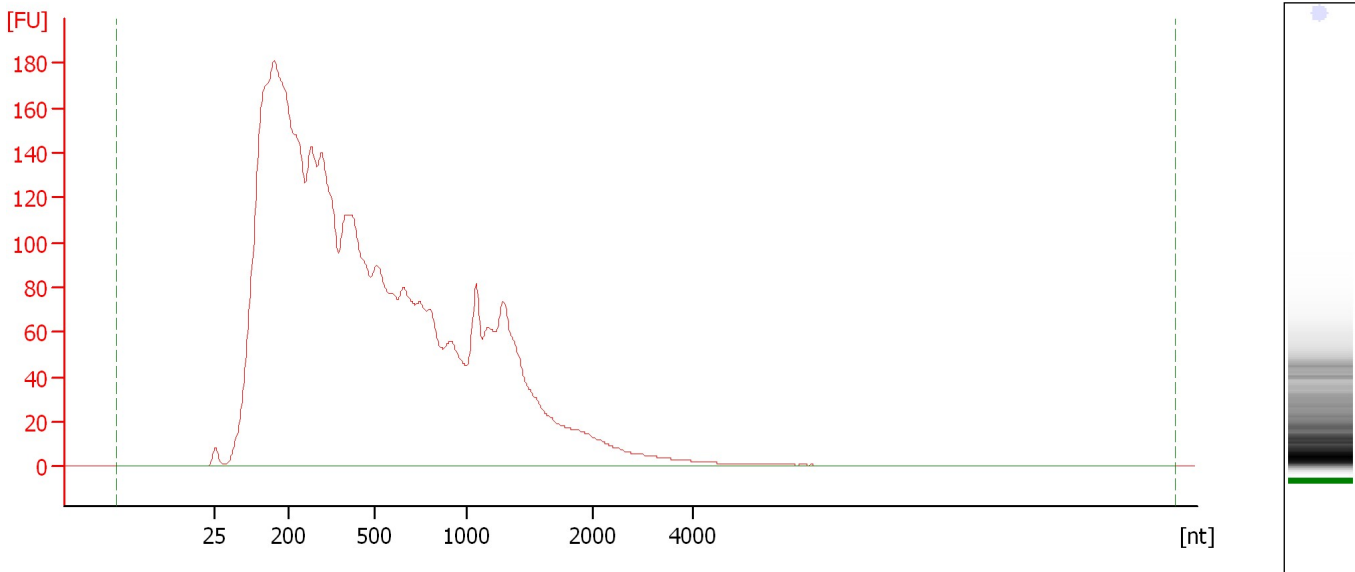
RNA Area:	182.8	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/ $\mu$ l	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 37 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 1 : Sample 37**

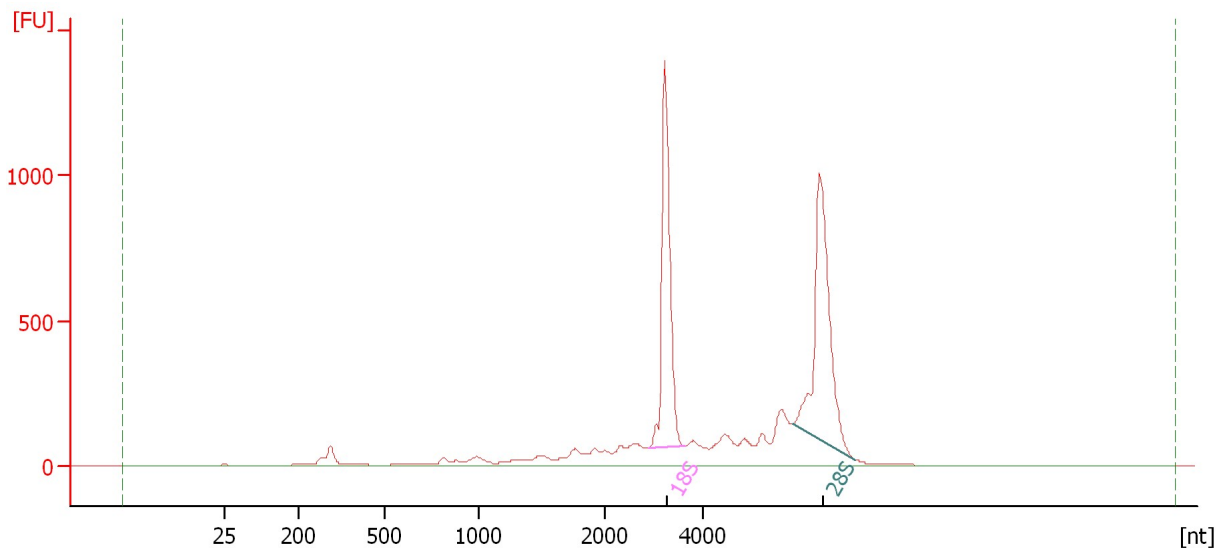
RNA Area:	4,367.4	RNA Integrity Number (RIN):	2 (B.02.08)
RNA Concentration:	3,585 ng/ $\mu$ l	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN:2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 38 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 2 : Sample 38**

RNA Area:	5,516.7	RNA Integrity Number (RIN):	8.5 (B.02.08)
RNA Concentration:	4,528 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: 8.50

**Fragment table for sample 2 : Sample 38**

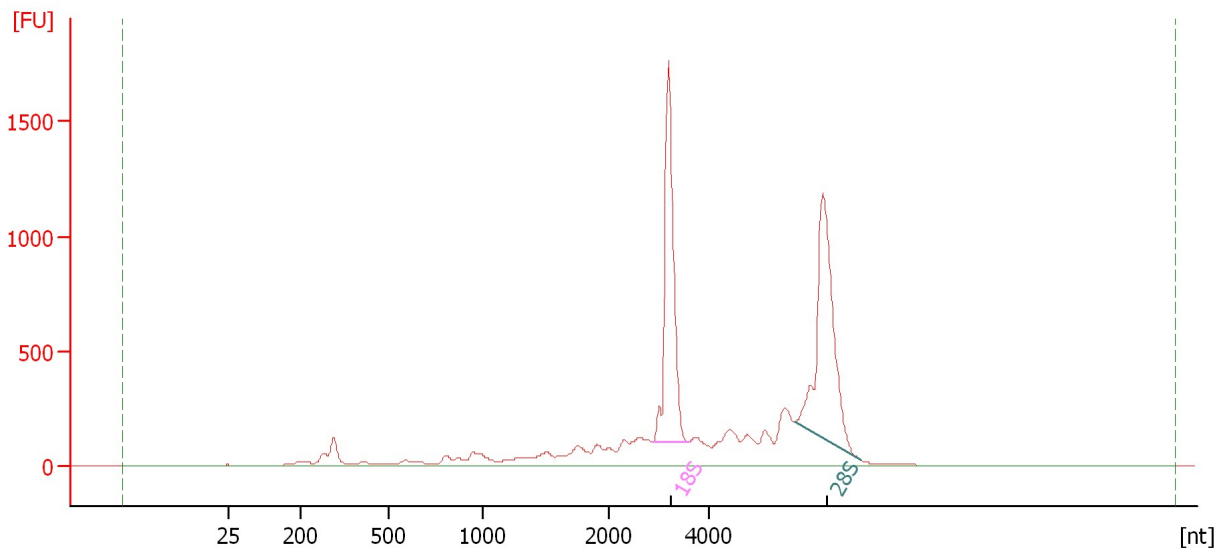
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,921	3,627	1,213.4	22.0
28S	5,790	7,053	1,392.3	25.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 39 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 3 : Sample 39**

RNA Area:	7,853.1	RNA Integrity Number (RIN):	8.2 (B.02.08)
RNA Concentration:	6,446 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: 8.20

**Fragment table for sample 3 : Sample 39**

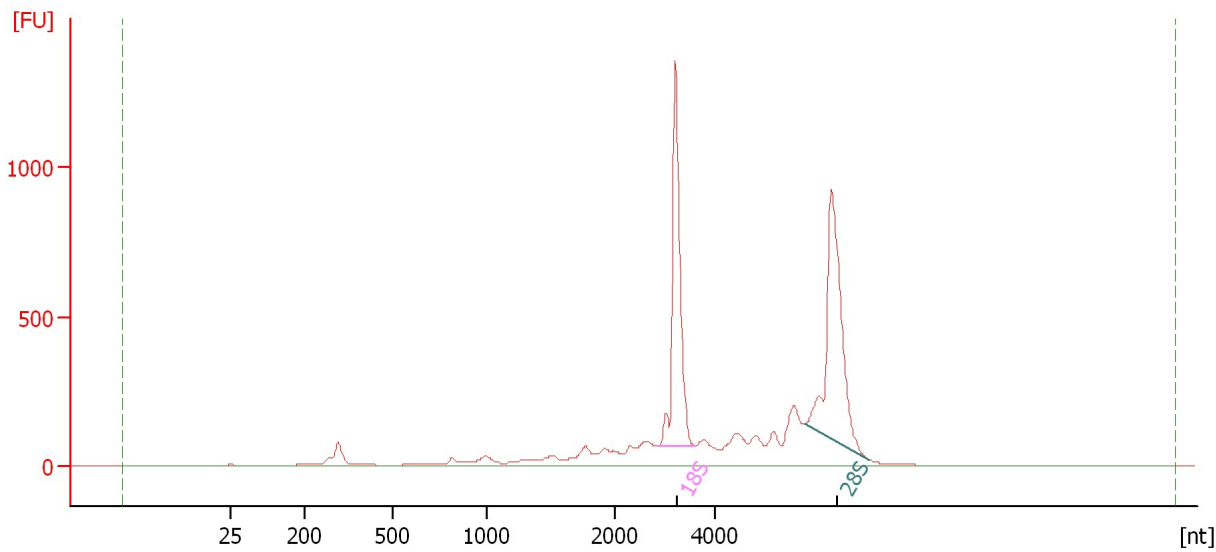
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,868	3,570	1,655.8	21.1
28S	5,720	7,018	1,773.1	22.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 40 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 4 : Sample 40**

RNA Area:	5,339.4	RNA Integrity Number (RIN):	8.5 (B.02.08)
RNA Concentration:	4,382 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: 8.50

**Fragment table for sample 4 : Sample 40**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,880	3,599	1,185.7	22.2
28S	5,756	7,047	1,281.5	24.0

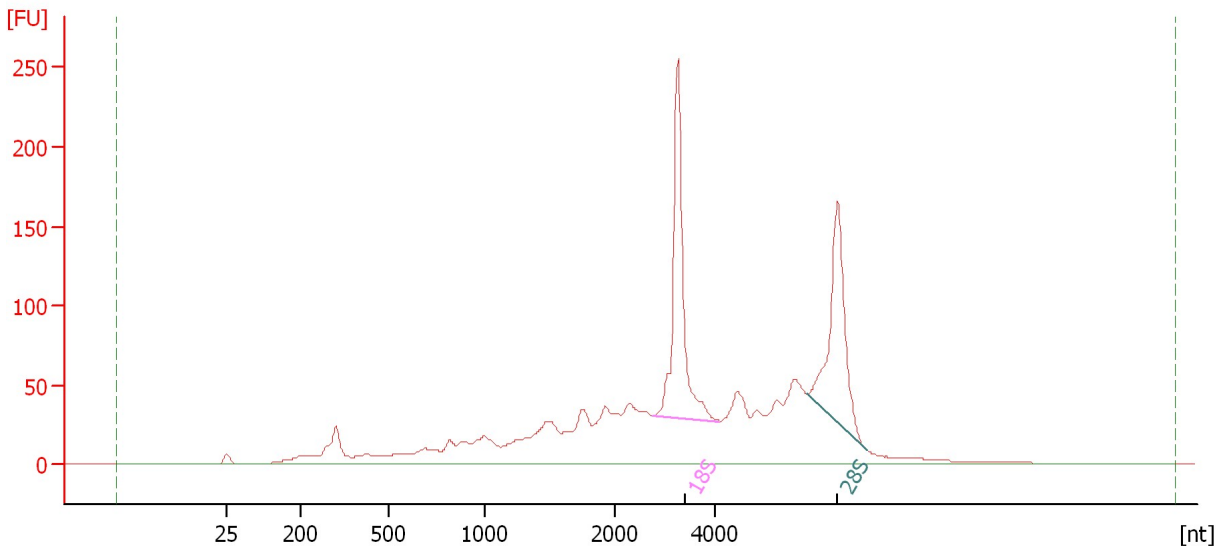


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 41 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 5 : Sample 41**

RNA Area:	1,856.6	RNA Integrity Number (RIN):	6.7 (B.02.08)
RNA Concentration:	1,524 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]:	0.8	Result Flagging Label:	RIN: 6.70

**Fragment table for sample 5 : Sample 41**

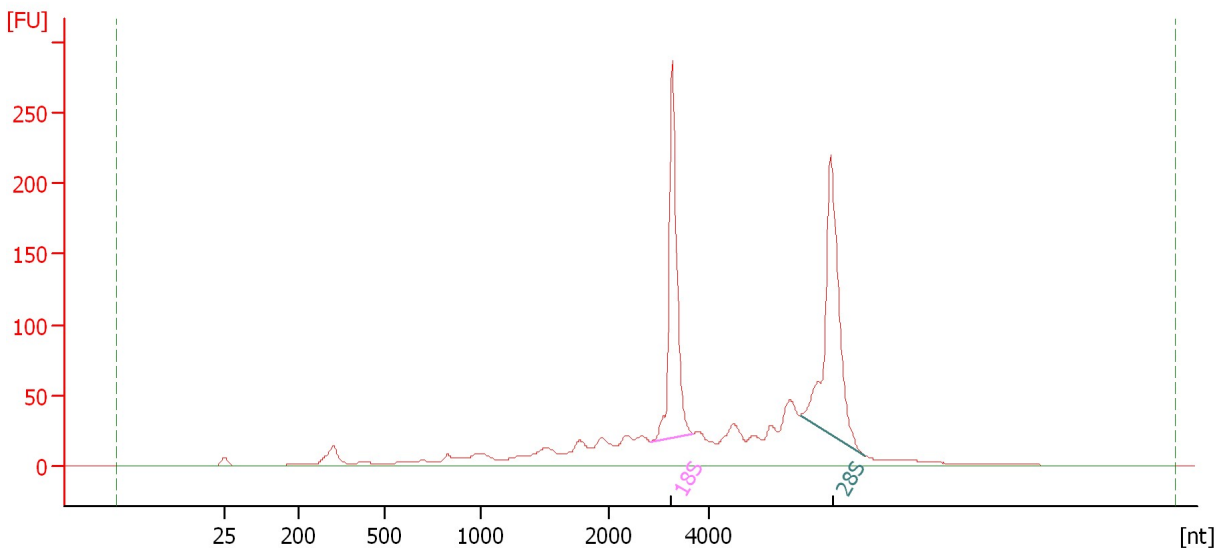
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,778	4,087	249.8	13.5
28S	5,818	7,000	207.3	11.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 42 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 6 : Sample 42**

RNA Area:	1,368.8	RNA Integrity Number (RIN):	7.8 (B.02.08)
RNA Concentration:	1,123 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]:	1.2	Result Flagging Label:	RIN: 7.80

**Fragment table for sample 6 : Sample 42**

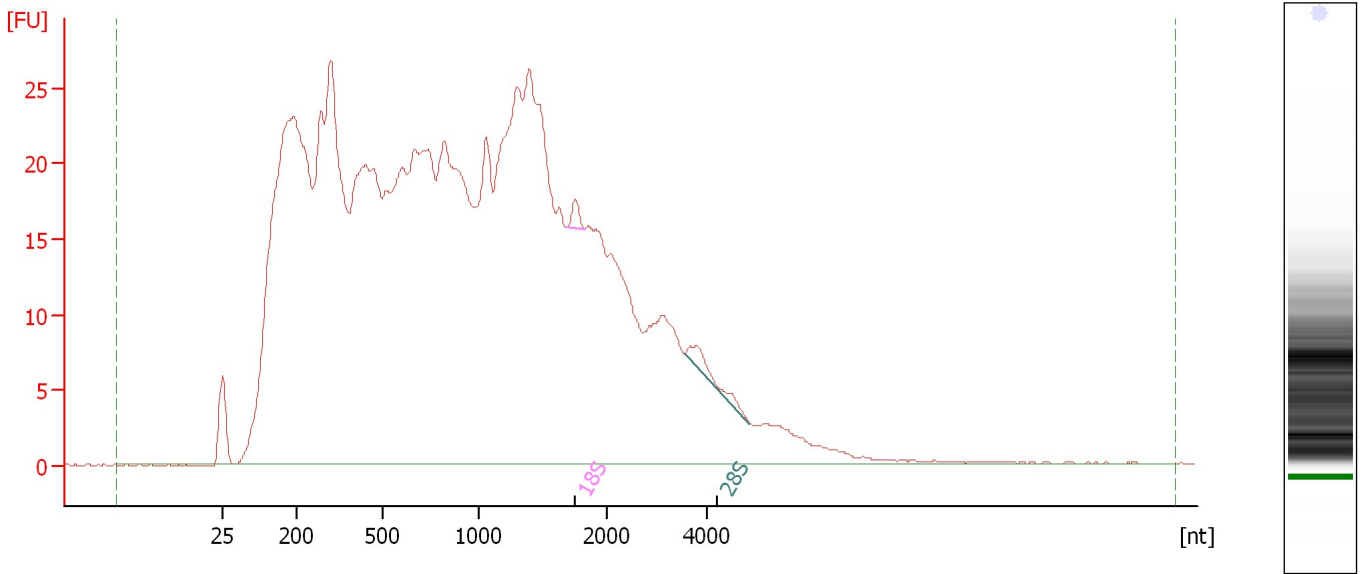
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,851	3,679	240.2	17.5
28S	5,824	7,098	277.9	20.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 43 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 7 : Sample 43**

RNA Area:	1,090.8	RNA Integrity Number (RIN):	2.2 (B.02.08)
RNA Concentration:	895 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]:	2.0	Result Flagging Label:	RIN: 2.20

**Fragment table for sample 7 : Sample 43**

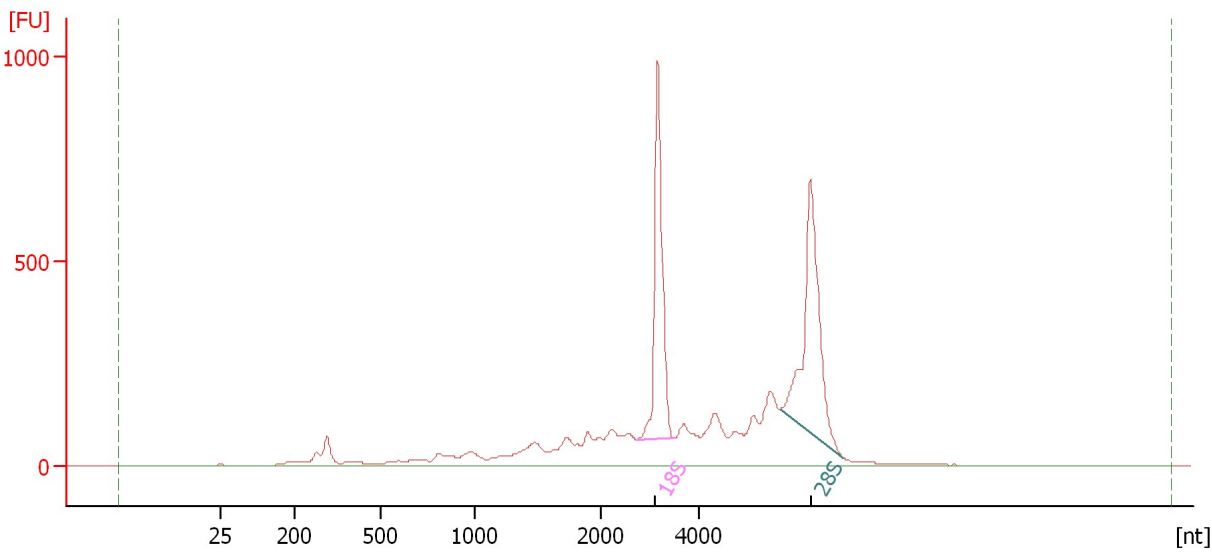
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,688	1,831	1.9	0.2
28S	3,549	4,847	3.7	0.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 44 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 8 : Sample 44**

RNA Area:	5,064.0	RNA Integrity Number (RIN):	7.6 (B.02.08)
RNA Concentration:	4,156 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: 7.60

**Fragment table for sample 8 : Sample 44**

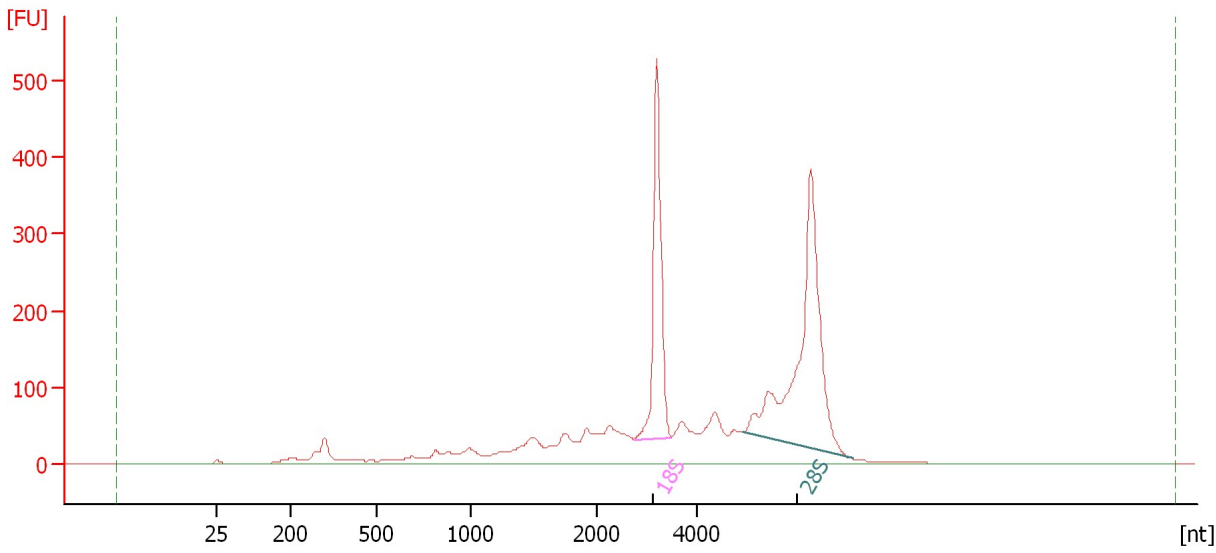
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,728	3,499	844.5	16.7
28S	5,640	6,904	965.5	19.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 45 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 9 : Sample 45**

RNA Area:	2,801.4	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	2,299 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: 7.90

**Fragment table for sample 9 : Sample 45**

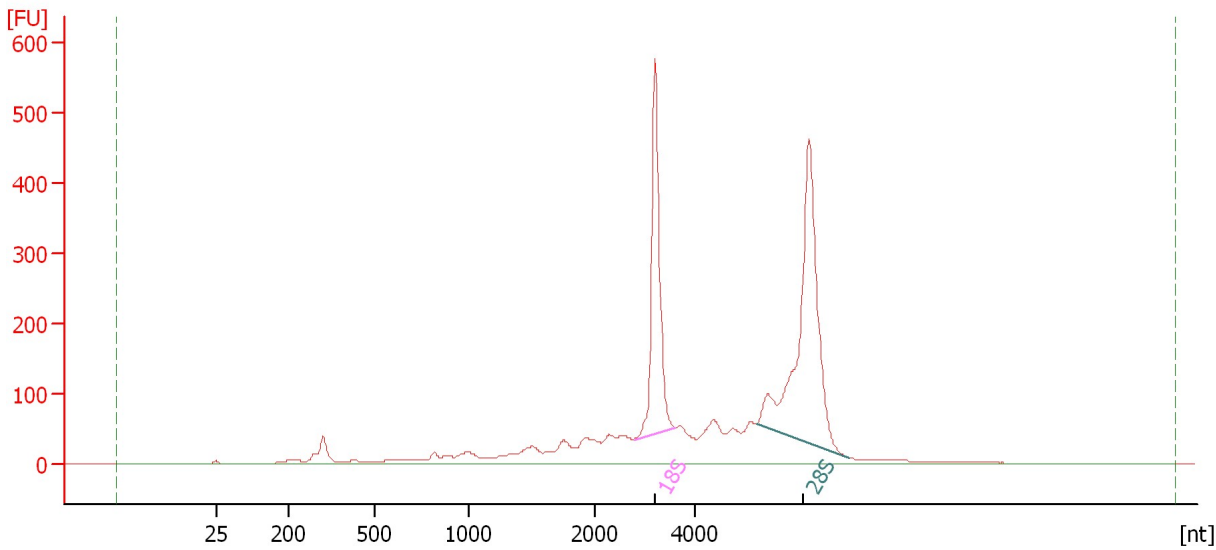
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,741	3,494	446.1	15.9
28S	4,934	7,127	803.1	28.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
 Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 46 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 10 : Sample 46**

RNA Area:	2,935.5	RNA Integrity Number (RIN):	8.3 (B.02.08)
RNA Concentration:	2,409 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: 8.30

**Fragment table for sample 10 : Sample 46**

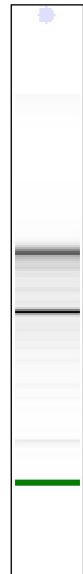
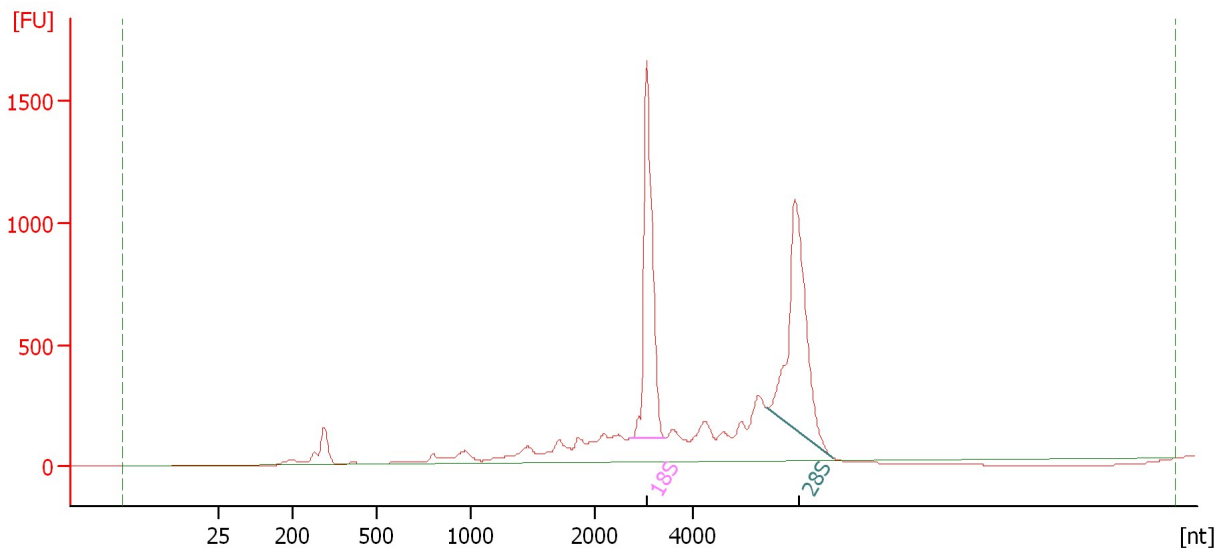
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,780	3,620	506.0	17.2
28S	5,236	7,111	839.4	28.6

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
 Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 47 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 11 : Sample 47**

RNA Area:	7,566.1	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	6,210 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 11 : Sample 47**

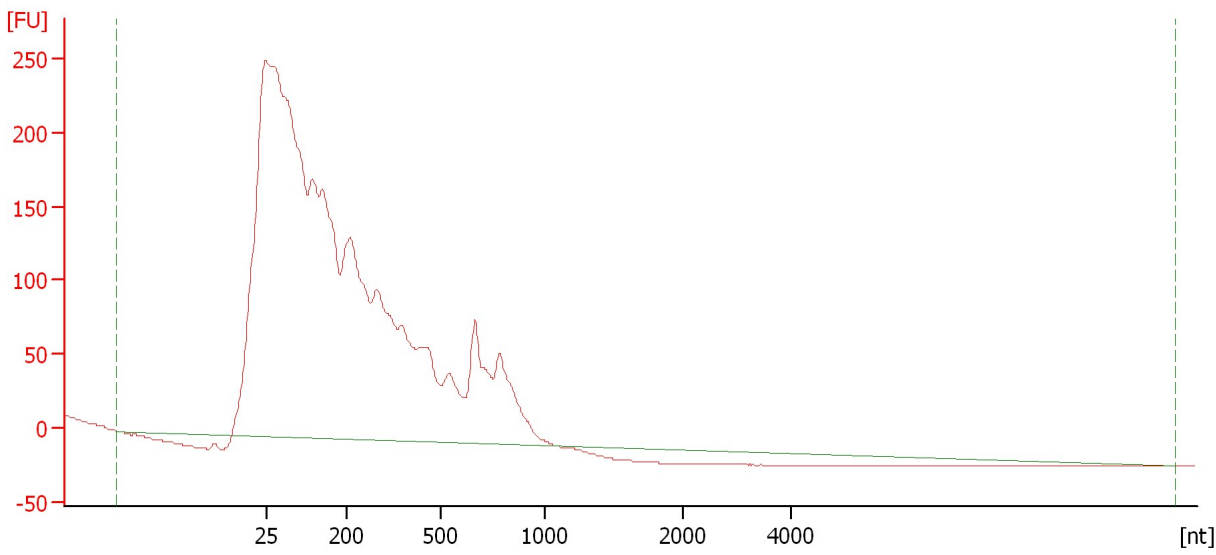
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,750	3,421	1,577.6	20.9
28S	5,519	6,839	1,734.2	22.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Electropherogram Summary Continued ...**

Sample 24 [ HiSeq 322 Total RNA QC ]



**Overall Results for sample 12 : Sample 24**

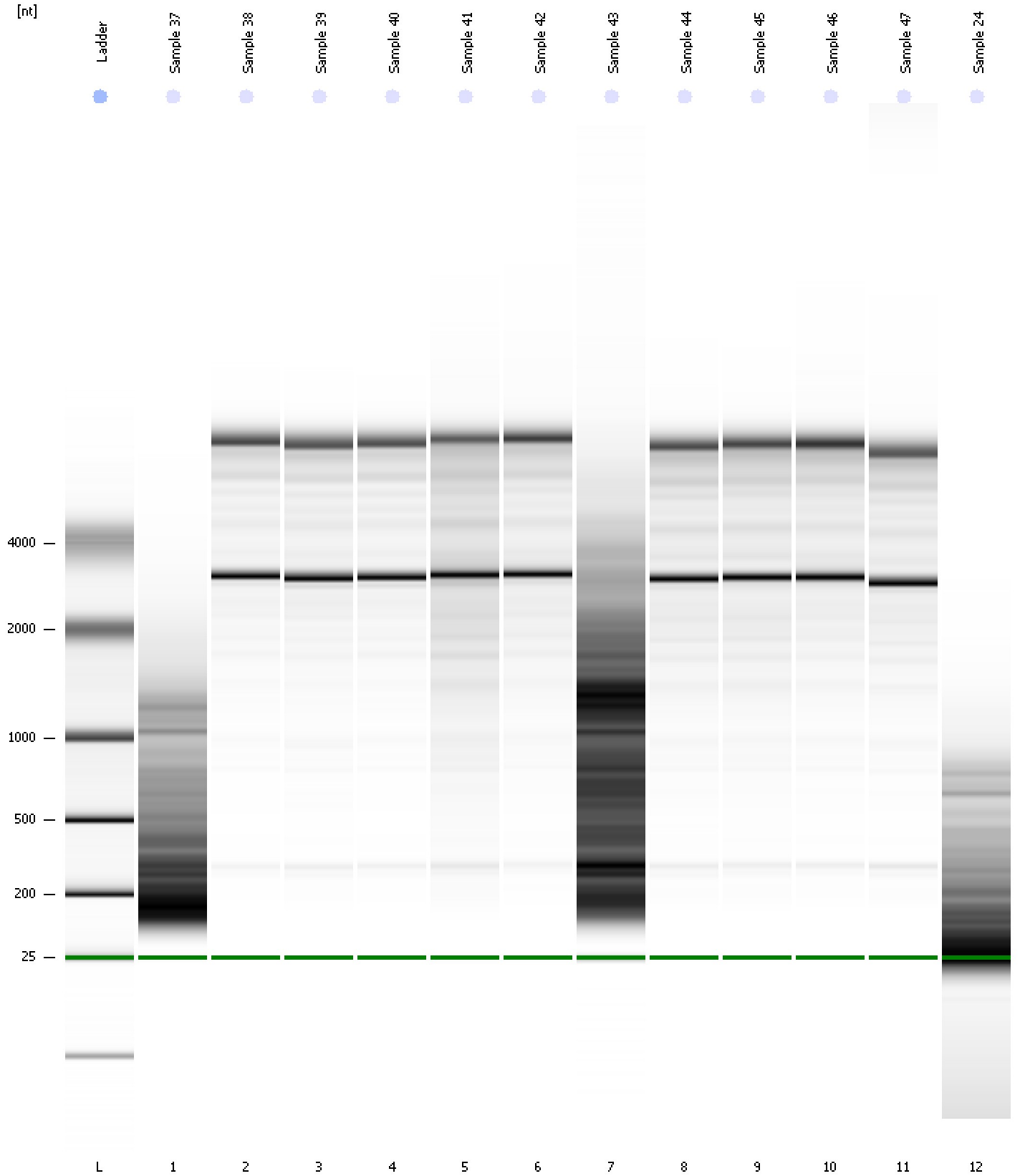
RNA Area:	2,562.1	RNA Integrity Number (RIN):	2.5 (B.02.08)
RNA Concentration:	2,103 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.50



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
Modified: 12/15/2015 11:59:37 AM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-15\2015-12-15\_002.xad

Created: 12/15/2015 11:36:35 AM  
 Modified: 12/15/2015 11:59:37 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		12/15/2015 11:59:36 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-12-15\2015-12-15_002.xad)		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/15/2015 11:36:40 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1