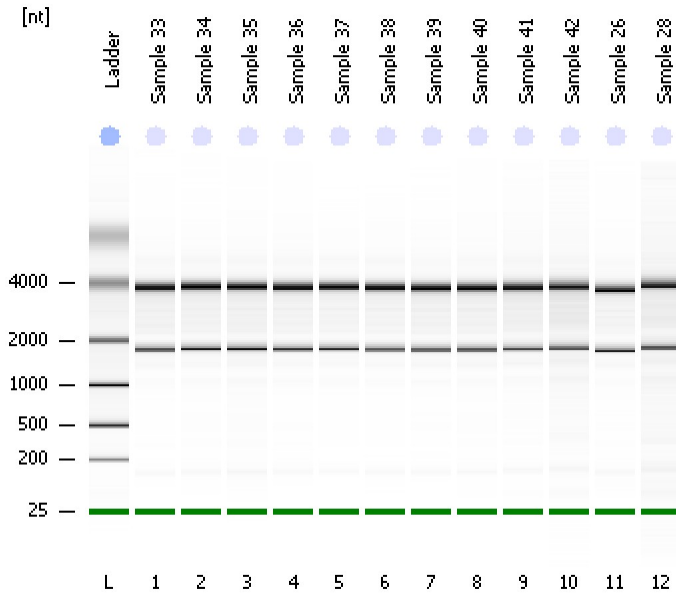


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electrophoresis File Run Summary**



Instrument Information:

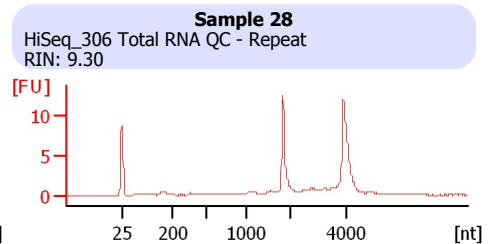
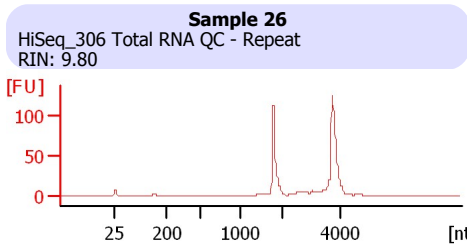
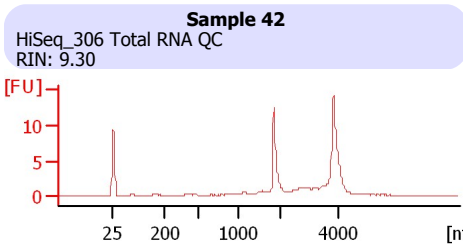
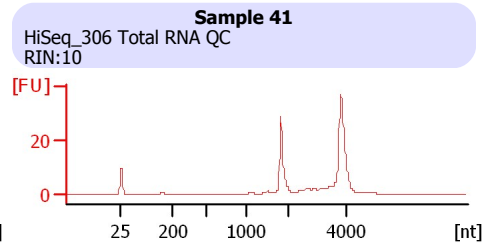
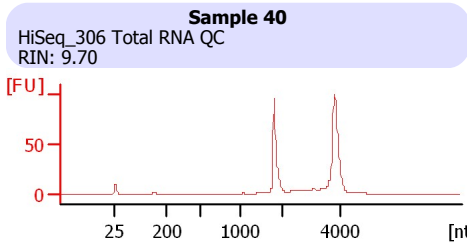
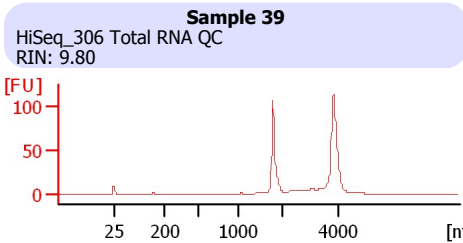
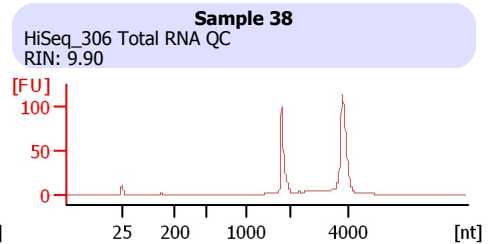
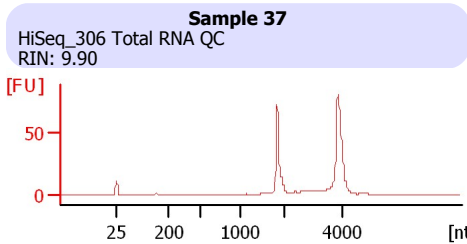
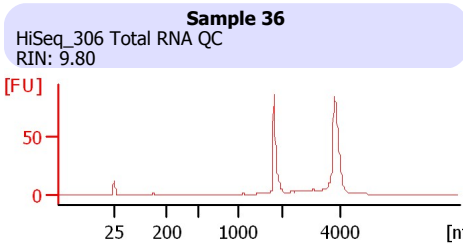
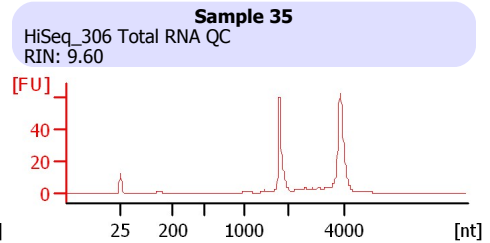
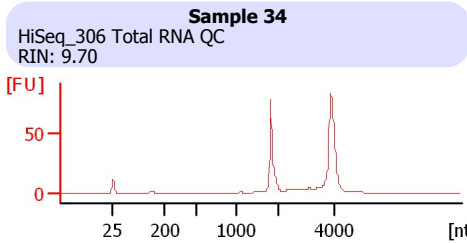
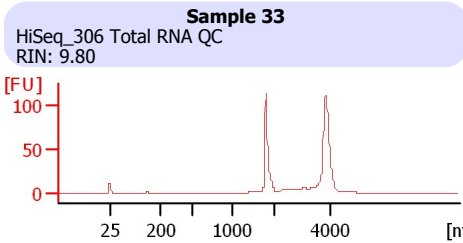
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 33	HiSeq_306 Total RNA QC	✓	RIN: 9.80	
Sample 34	HiSeq_306 Total RNA QC	✓	RIN: 9.70	
Sample 35	HiSeq_306 Total RNA QC	✓	RIN: 9.60	
Sample 36	HiSeq_306 Total RNA QC	✓	RIN: 9.80	
Sample 37	HiSeq_306 Total RNA QC	✓	RIN: 9.90	
Sample 38	HiSeq_306 Total RNA QC	✓	RIN: 9.90	
Sample 39	HiSeq_306 Total RNA QC	✓	RIN: 9.80	
Sample 40	HiSeq_306 Total RNA QC	✓	RIN: 9.70	
Sample 41	HiSeq_306 Total RNA QC	✓	RIN:10	
Sample 42	HiSeq_306 Total RNA QC	✓	RIN: 9.30	
Sample 26	HiSeq_306 Total RNA QC	✓	RIN: 9.80	
	- Repeat			
Sample 28	HiSeq_306 Total RNA QC	✓	RIN: 9.30	
	- Repeat			
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 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

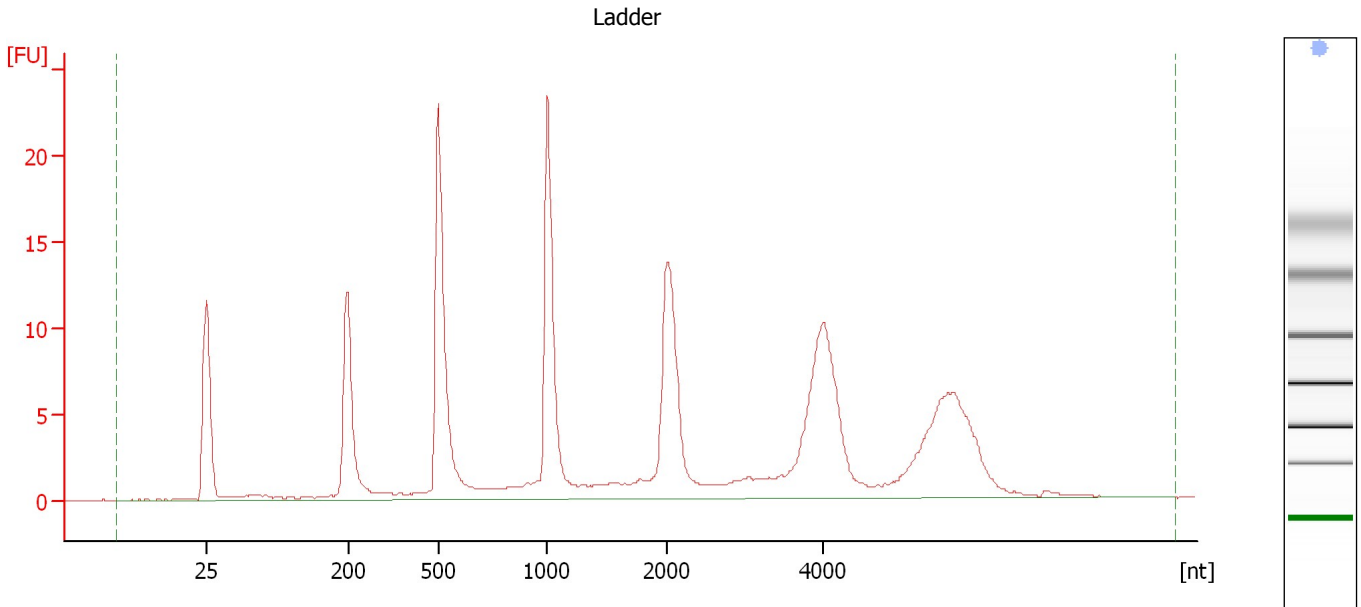
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary**



**Overall Results for Ladder**

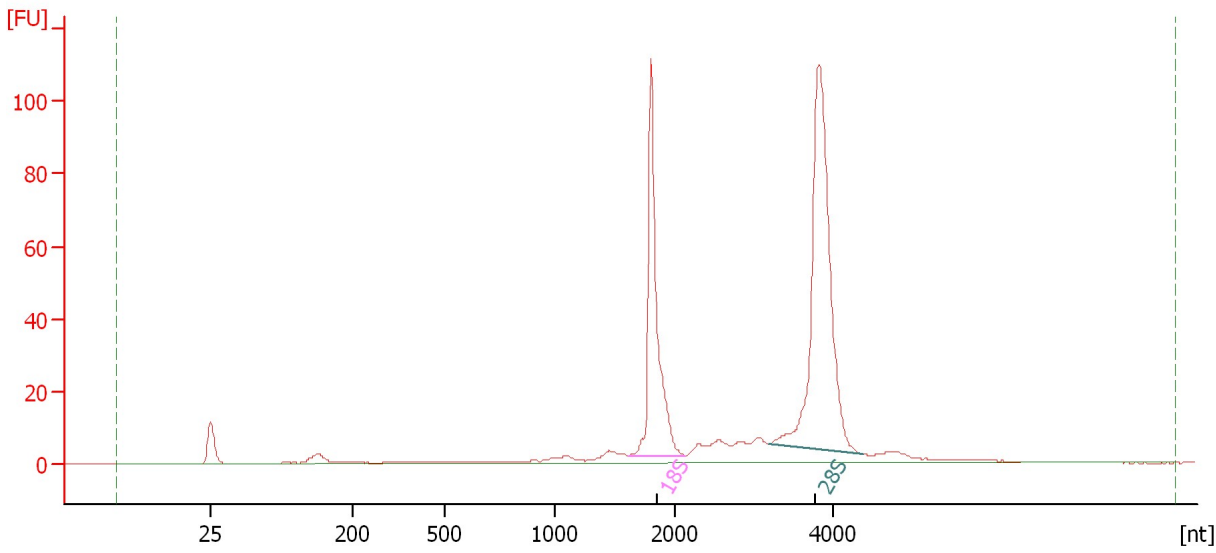
RNA Area:	195.8	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 33 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 1 : Sample 33**

RNA Area: 464.5                      RNA Integrity Number (RIN): 9.8 (B.02.08)  
RNA Concentration: 356 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.7              Result Flagging Label: RIN: 9.80

**Fragment table for sample 1 : Sample 33**

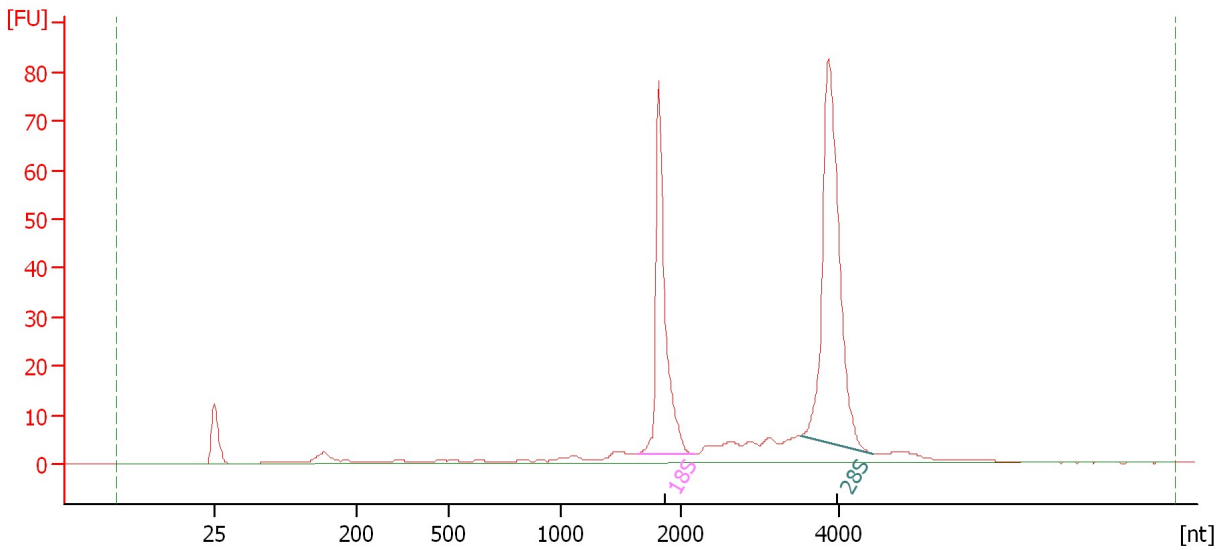
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,622	2,127	115.0	24.8
28S	3,186	4,395	195.6	42.1

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 34 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 2 : Sample 34**

RNA Area:	343.2	RNA Integrity Number (RIN):	9.7 (B.02.08)
RNA Concentration:	263 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: 9.70

**Fragment table for sample 2 : Sample 34**

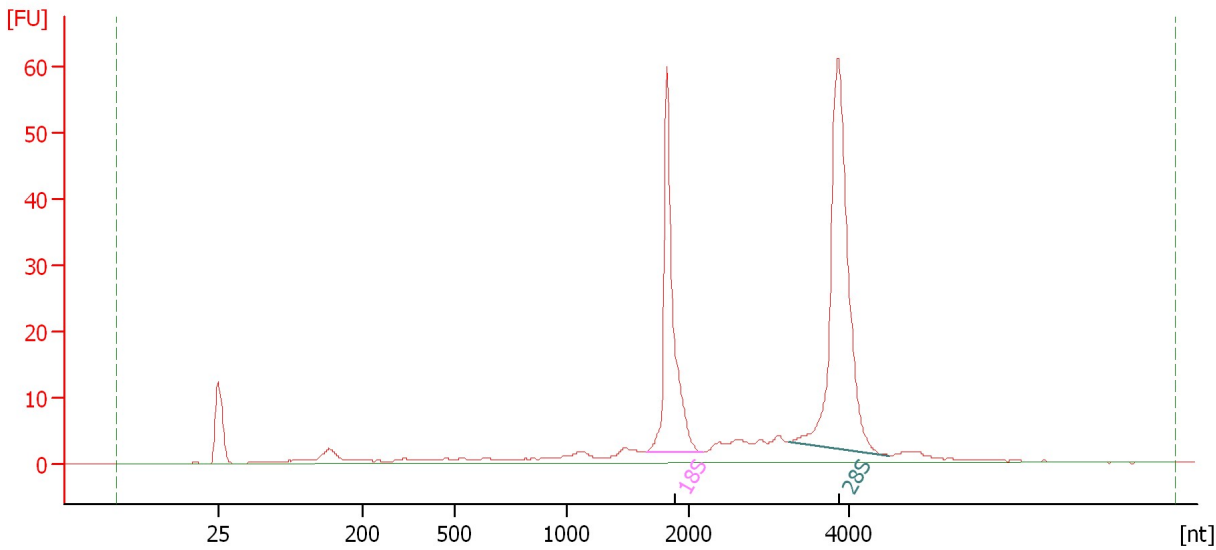
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,636	2,170	81.1	23.6
28S	3,506	4,424	134.8	39.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 35 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 3 : Sample 35**

RNA Area:	275.0	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	211 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: 9.60

**Fragment table for sample 3 : Sample 35**

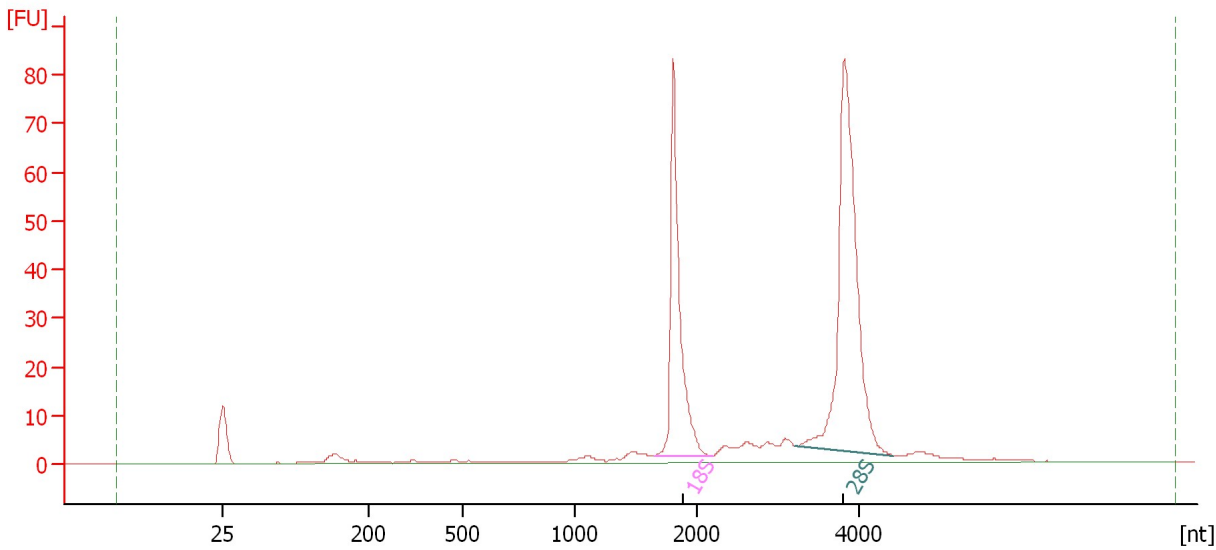
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,642	2,174	63.8	23.2
28S	3,231	4,503	103.2	37.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 36 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 4 : Sample 36**

RNA Area:	329.6	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	252 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: 9.80

**Fragment table for sample 4 : Sample 36**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,656	2,177	82.3	25.0
28S	3,213	4,434	143.3	43.5

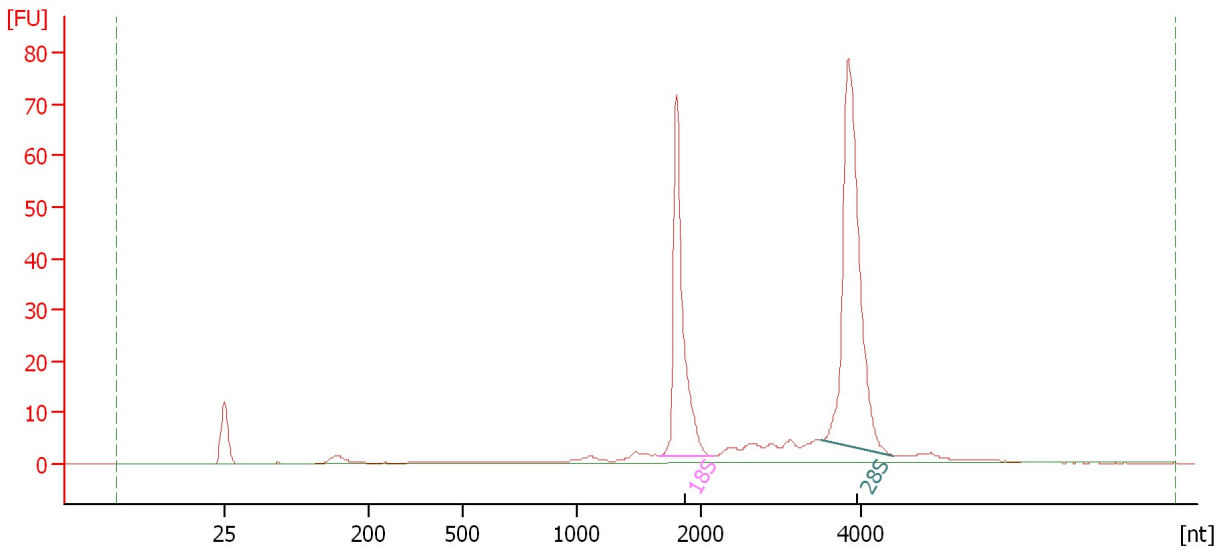


Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 37 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 5 : Sample 37**

RNA Area:	293.1	RNA Integrity Number (RIN):	9.9 (B.02.08)
RNA Concentration:	225 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: 9.90

**Fragment table for sample 5 : Sample 37**

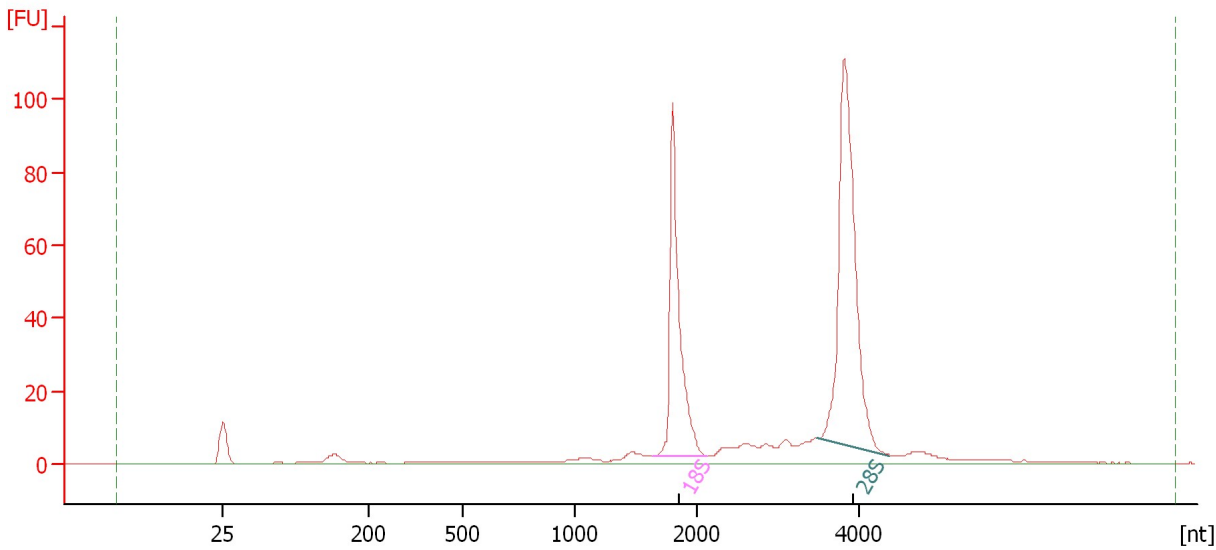
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,667	2,164	73.9	25.2
28S	3,490	4,404	122.9	41.9

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 38 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 6 : Sample 38**

RNA Area:	424.1	RNA Integrity Number (RIN):	9.9 (B.02.08)
RNA Concentration:	325 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: 9.90

**Fragment table for sample 6 : Sample 38**

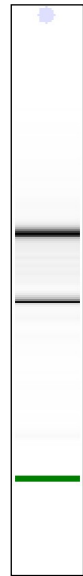
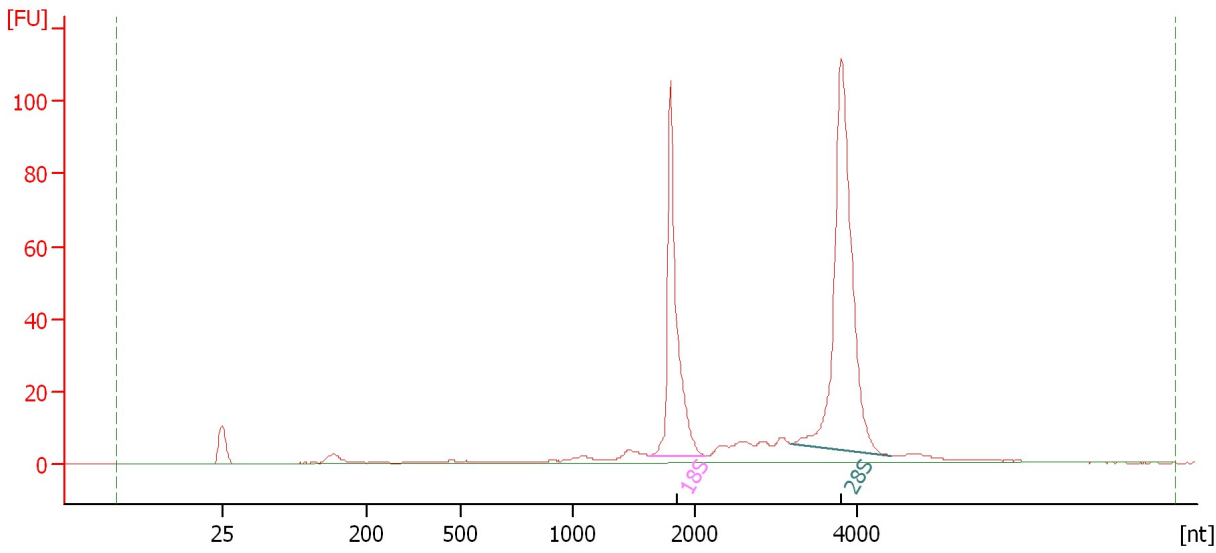
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,639	2,124	105.1	24.8
28S	3,491	4,381	173.7	41.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 39 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 7 : Sample 39**

RNA Area:	435.8	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	334 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: 9.80

**Fragment table for sample 7 : Sample 39**

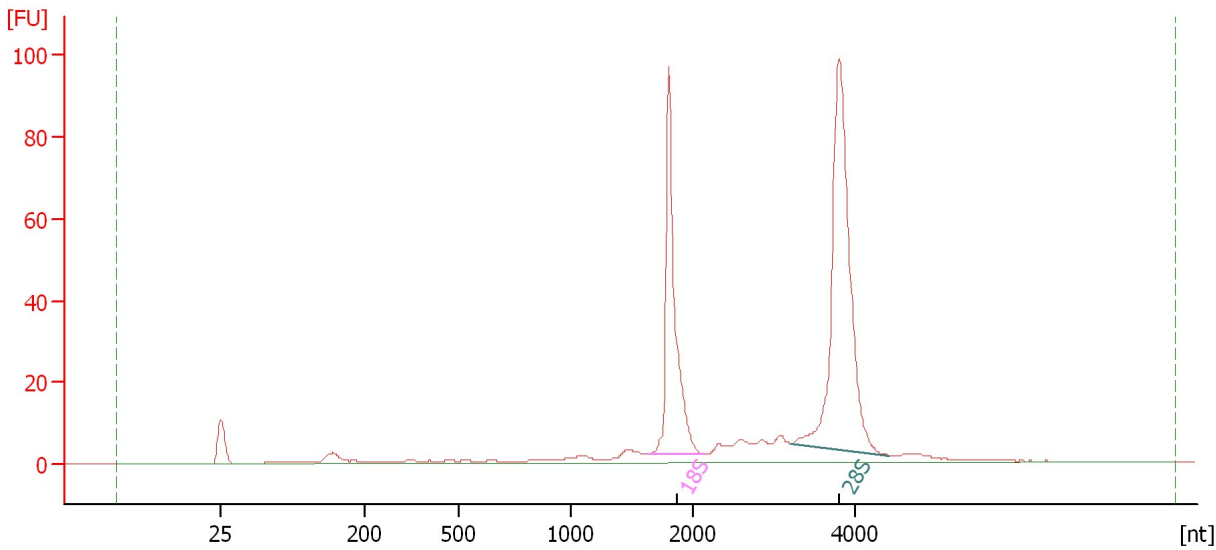
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,620	2,123	108.6	24.9
28S	3,174	4,425	189.9	43.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 40 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 8 : Sample 40**

RNA Area: 405.9                      RNA Integrity Number (RIN): 9.7 (B.02.08)  
RNA Concentration: 311 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.7              Result Flagging Label: RIN: 9.70

**Fragment table for sample 8 : Sample 40**

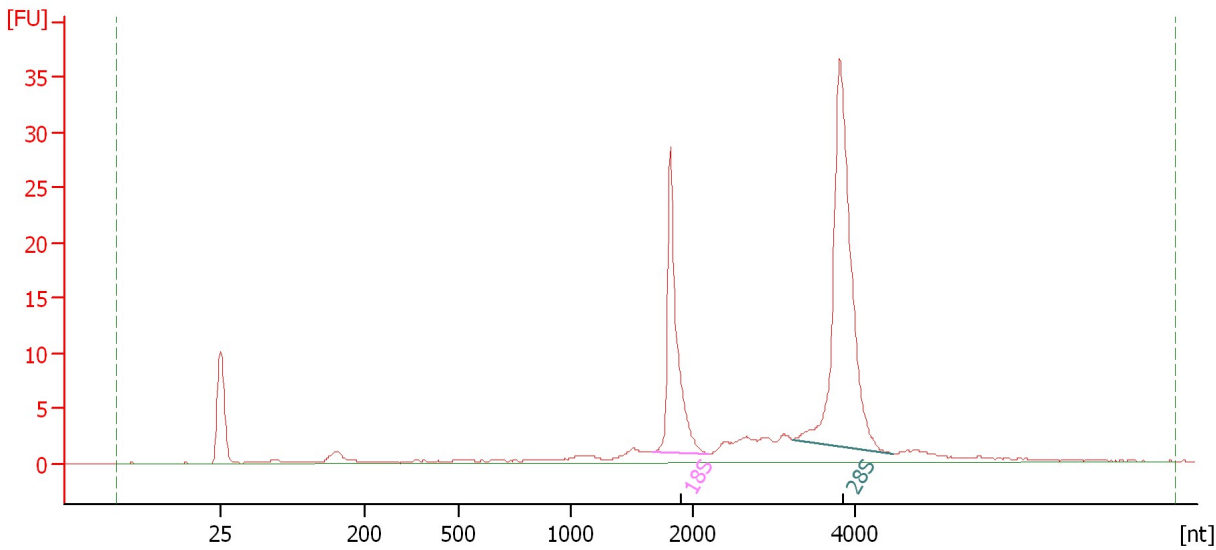
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,627	2,135	100.7	24.8
28S	3,215	4,428	170.4	42.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 41 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 9 : Sample 41**

RNA Area:	146.8	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	112 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:10

**Fragment table for sample 9 : Sample 41**

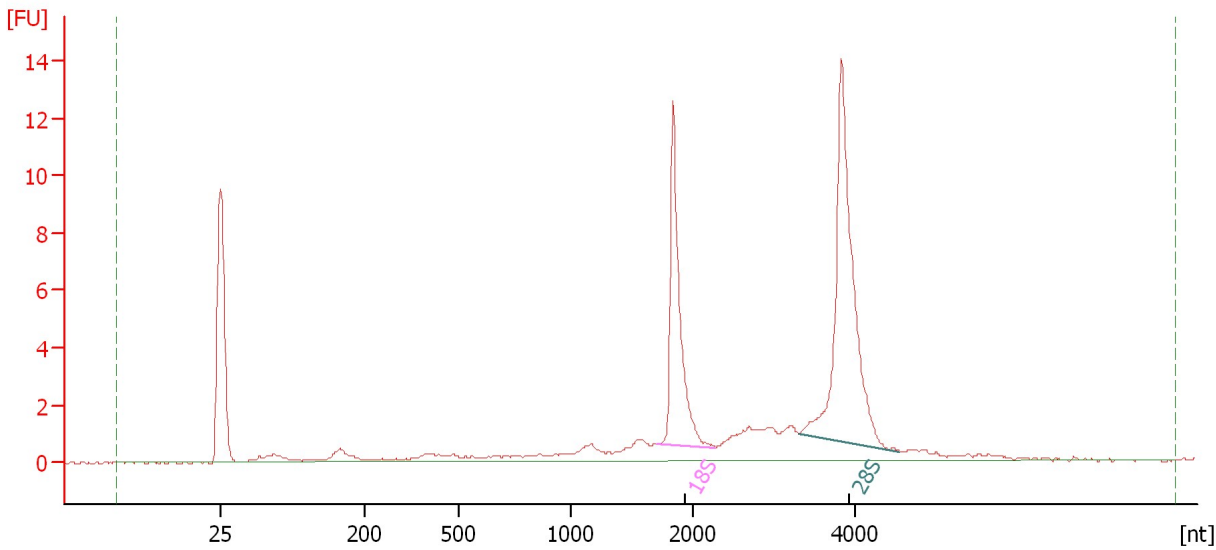
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,662	2,189	30.2	20.6
28S	3,229	4,495	62.2	42.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 42 [ HiSeq\_306 Total RNA QC ]



**Overall Results for sample 10 : Sample 42**

RNA Area:	63.0	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	48 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: 9.30

**Fragment table for sample 10 : Sample 42**

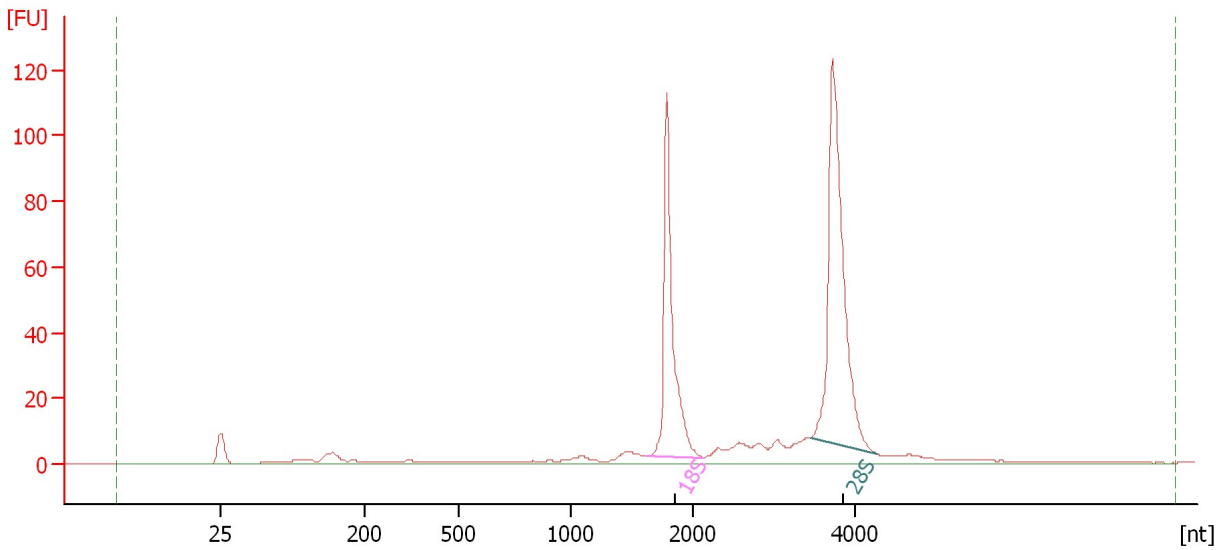
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,697	2,269	12.6	20.1
28S	3,322	4,562	22.8	36.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 26 [ HiSeq\_306 Total RNA QC - Repeat ]



**Overall Results for sample 11 : Sample 26**

RNA Area: 456.6                      RNA Integrity Number (RIN): 9.8 (B.02.08)  
RNA Concentration: 350 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5                      Result Flagging Label: RIN: 9.80

**Fragment table for sample 11 : Sample 26**

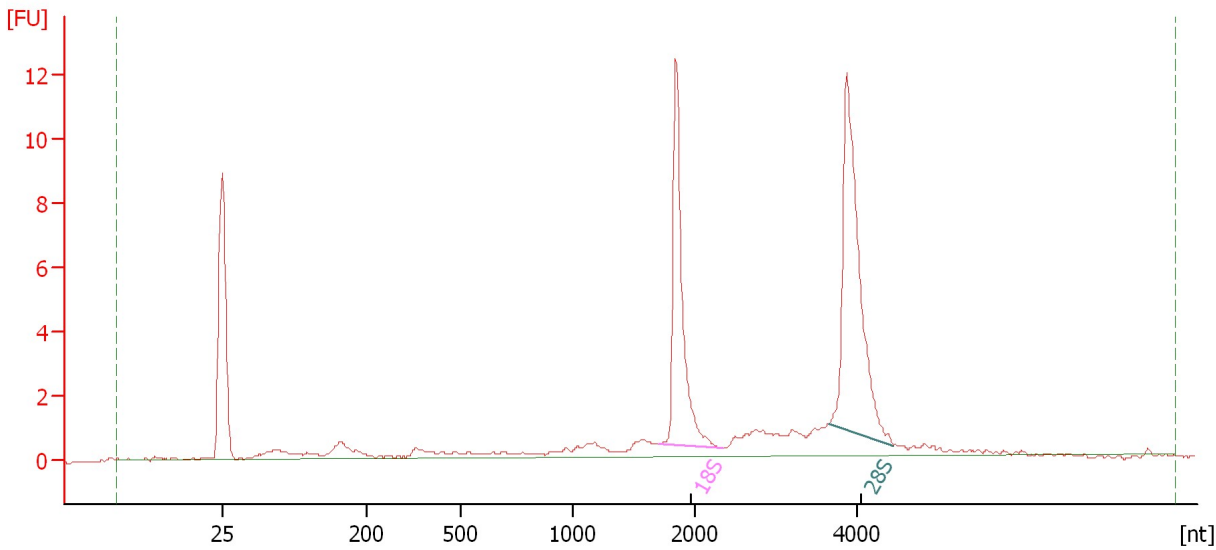
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,610	2,122	116.4	25.5
28S	3,455	4,295	171.9	37.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Electropherogram Summary Continued ...**

Sample 28 [ HiSeq\_306 Total RNA QC - Repeat ]



**Overall Results for sample 12 : Sample 28**

RNA Area:	56.0	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	43 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: 9.30

**Fragment table for sample 12 : Sample 28**

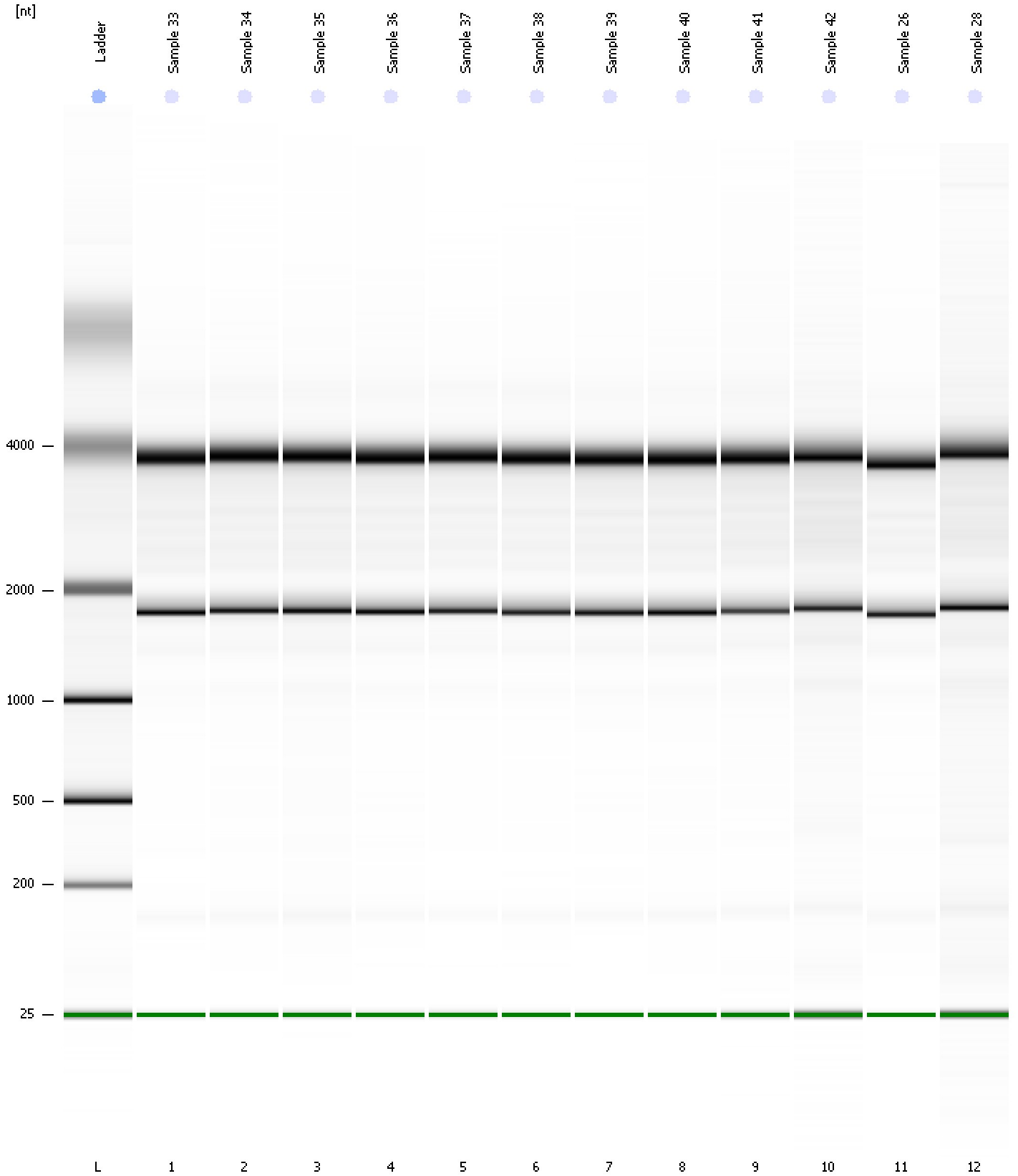
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,698	2,336	12.5	22.3
28S	3,666	4,465	17.8	31.8



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
Modified: 12/1/2015 12:22:48 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-01\2015-12-01\_001.xad

Created: 12/1/2015 11:59:01 AM  
 Modified: 12/1/2015 12:22:48 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		12/1/2015 12:22:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-12-01\2015-12-01_001.xad)		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/1/2015 11:59:06 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1