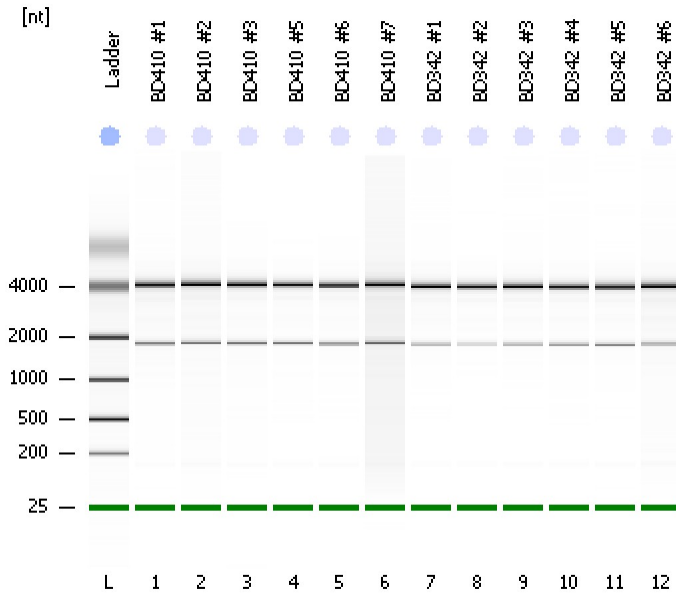


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 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.

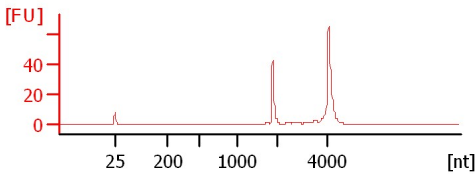
Chip Information:

Chip Lot #:

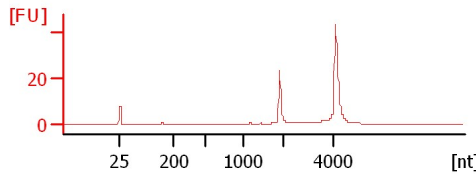
Reagent Kit Lot #:

Chip Comments:

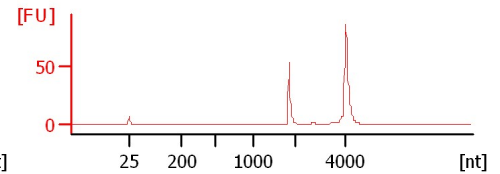
**BD410 #1**  
HiSeq\_071\_total RNA QC  
RIN:10



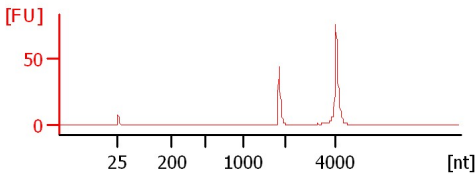
**BD410 #2**  
HiSeq\_071\_total RNA QC  
RIN: 9.30



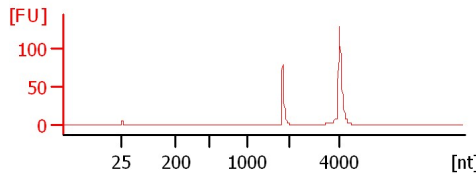
**BD410 #3**  
HiSeq\_071\_total RNA QC  
RIN:10



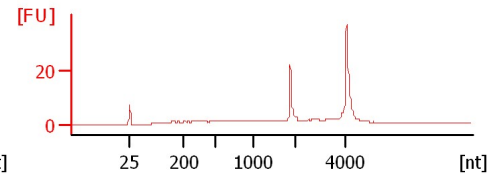
**BD410 #5**  
HiSeq\_071\_total RNA QC  
RIN:10



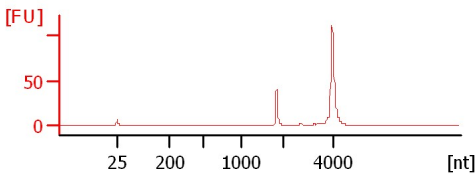
**BD410 #6**  
HiSeq\_071\_total RNA QC  
RIN:10



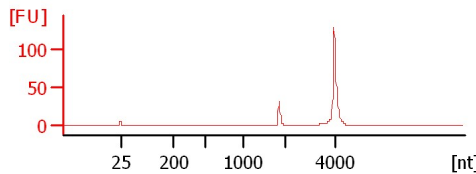
**BD410 #7**  
HiSeq\_071\_total RNA QC  
RIN: 8.20



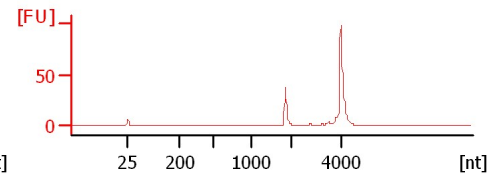
**BD342 #1**  
HiSeq\_071\_total RNA QC  
RIN: 9.40



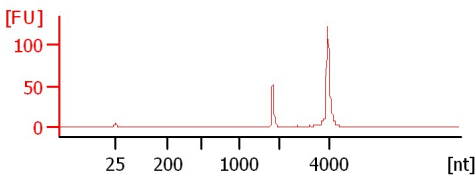
**BD342 #2**  
HiSeq\_071\_total RNA QC  
RIN: 8.70



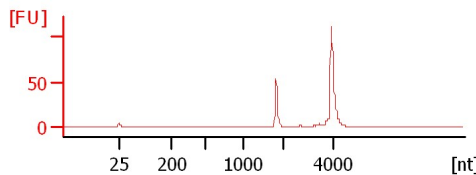
**BD342 #3**  
HiSeq\_071\_total RNA QC  
RIN: 9.50



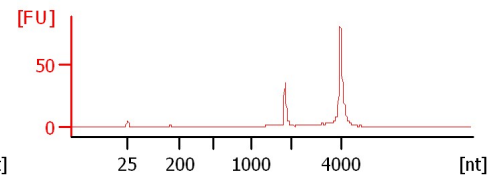
**BD342 #4**  
HiSeq\_071\_total RNA QC  
RIN: 9.50



**BD342 #5**  
HiSeq\_071\_total RNA QC  
RIN: 9.80



**BD342 #6**  
HiSeq\_071\_total RNA QC  
RIN: 8.80



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
BD410 #1	HiSeq_071_total RNA QC	✓	RIN:10	
BD410 #2	HiSeq_071_total RNA QC	✓	RIN: 9.30	
BD410 #3	HiSeq_071_total RNA QC	✓	RIN:10	
BD410 #5	HiSeq_071_total RNA QC	✓	RIN:10	
BD410 #6	HiSeq_071_total RNA QC	✓	RIN:10	
BD410 #7	HiSeq_071_total RNA QC	✓	RIN: 8.20	
BD342 #1	HiSeq_071_total RNA QC	✓	RIN: 9.40	
BD342 #2	HiSeq_071_total RNA QC	✓	RIN: 8.70	
BD342 #3	HiSeq_071_total RNA QC	✓	RIN: 9.50	
BD342 #4	HiSeq_071_total RNA QC	✓	RIN: 9.50	
BD342 #5	HiSeq_071_total RNA QC	✓	RIN: 9.80	
BD342 #6	HiSeq_071_total RNA QC	✓	RIN: 8.80	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 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

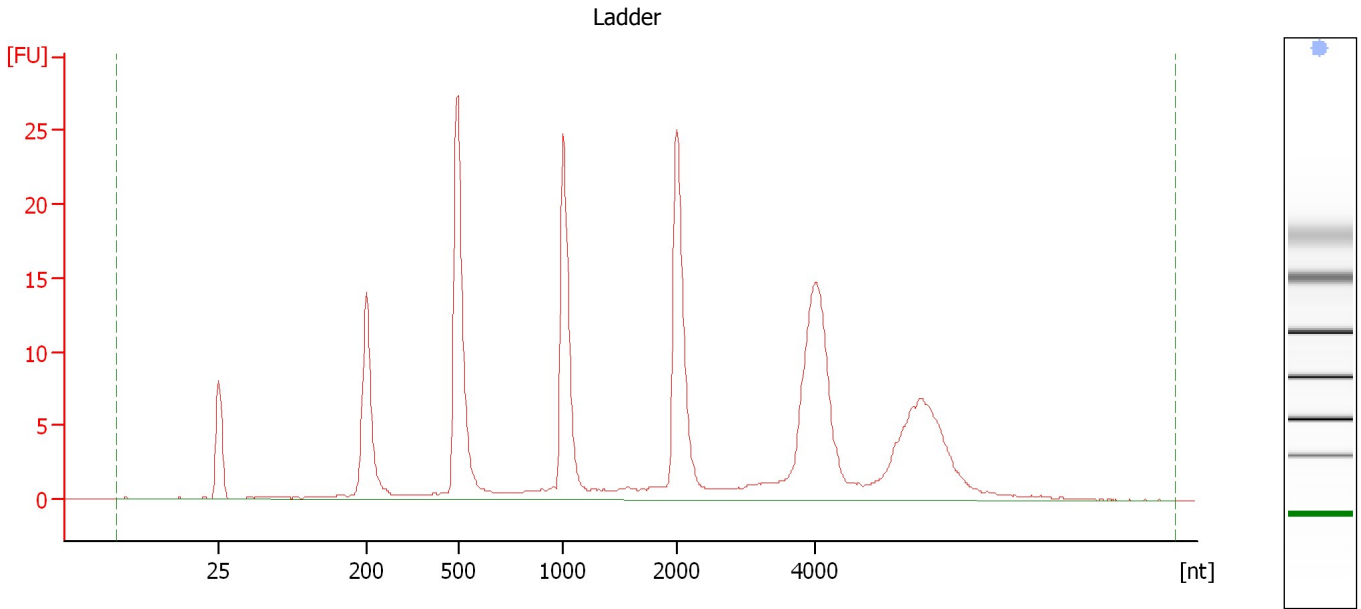
**Ladder**

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary**



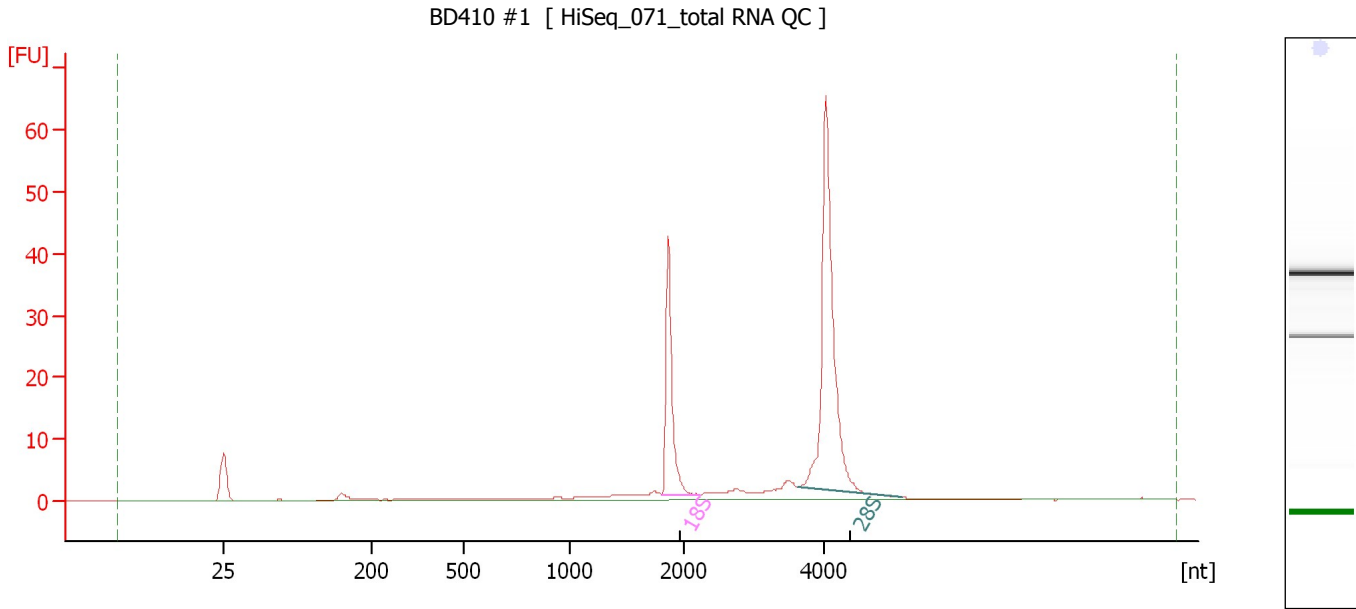
**Overall Results for Ladder**

RNA Area:	215.6	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\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : BD410 #1**

RNA Area: 152.9                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 106 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.4              Result Flagging Label: RIN:10

**Fragment table for sample 1 : BD410 #1**

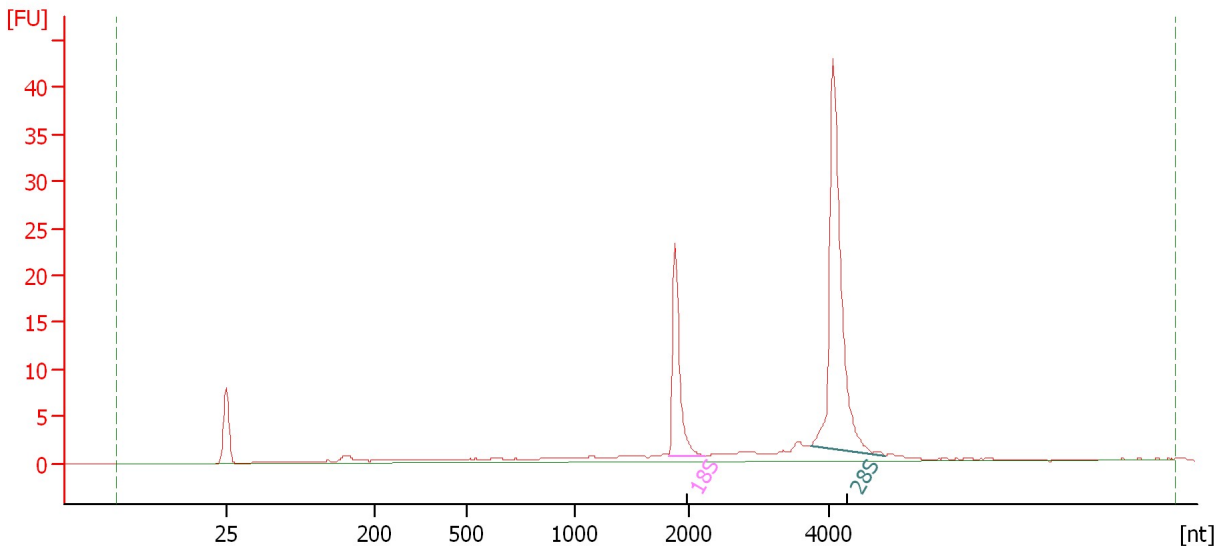
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,806	2,234	31.4	20.5
28S	3,626	5,124	73.8	48.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD410 #2 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 2 : BD410 #2**

RNA Area:	101.3	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	71 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]:	2.7	Result Flagging Label:	RIN: 9.30

**Fragment table for sample 2 : BD410 #2**

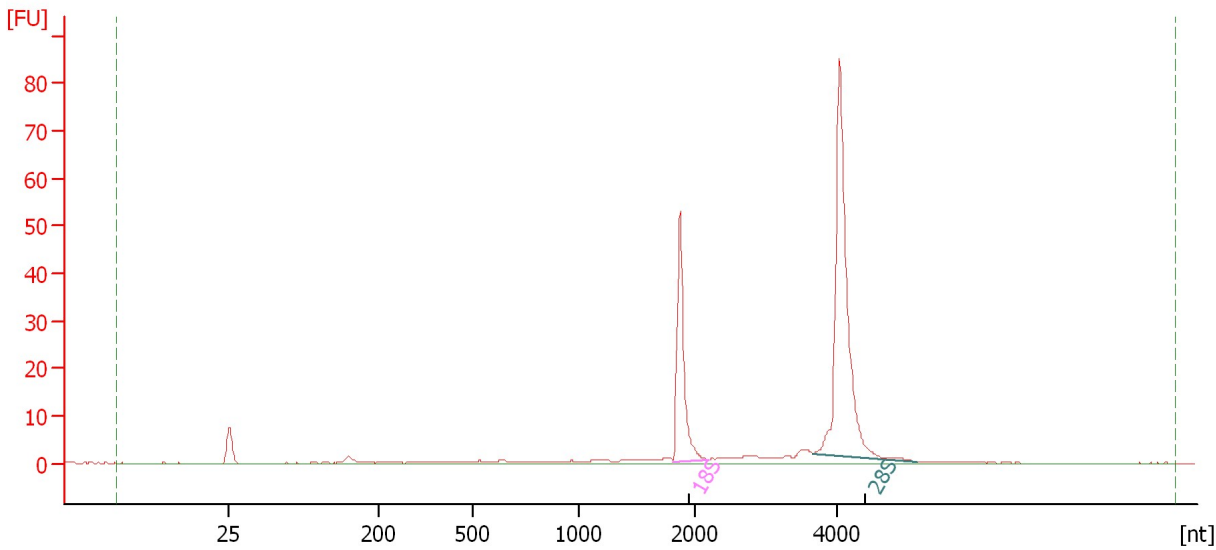
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,829	2,223	17.6	17.3
28S	3,728	4,776	47.4	46.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD410 #3 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 3 : BD410 #3**

RNA Area: 179.1                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 125 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.3                      Result Flagging Label: RIN:10

**Fragment table for sample 3 : BD410 #3**

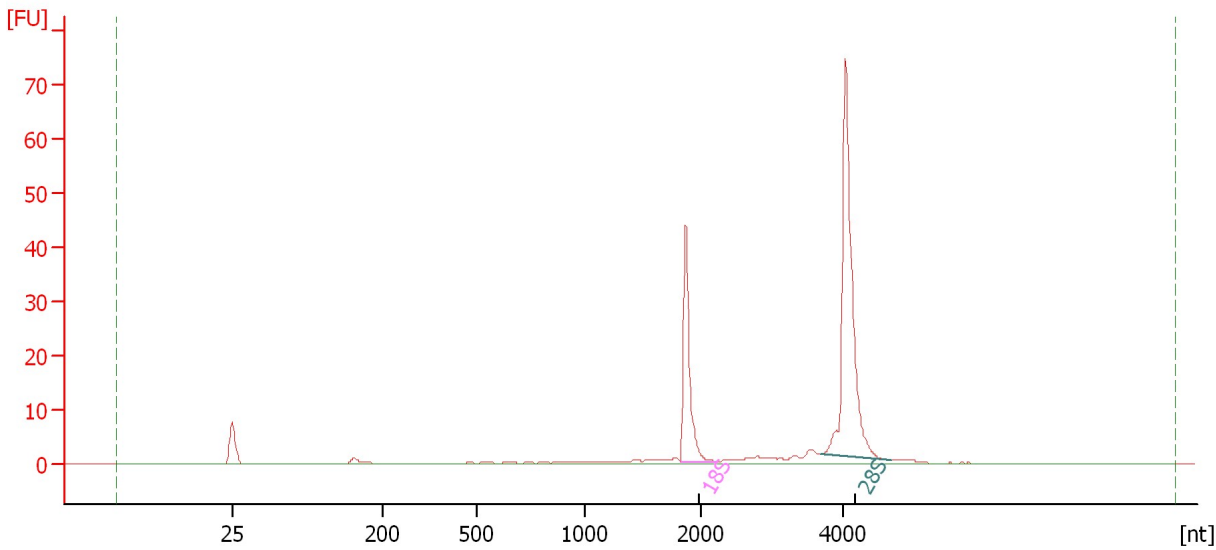
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,815	2,182	40.4	22.5
28S	3,677	5,127	94.4	52.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD410 #5 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 4 : BD410 #5**

RNA Area: 141.3                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 98 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.2              Result Flagging Label: RIN:10

**Fragment table for sample 4 : BD410 #5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,819	2,216	32.4	22.9
28S	3,673	4,678	71.3	50.5

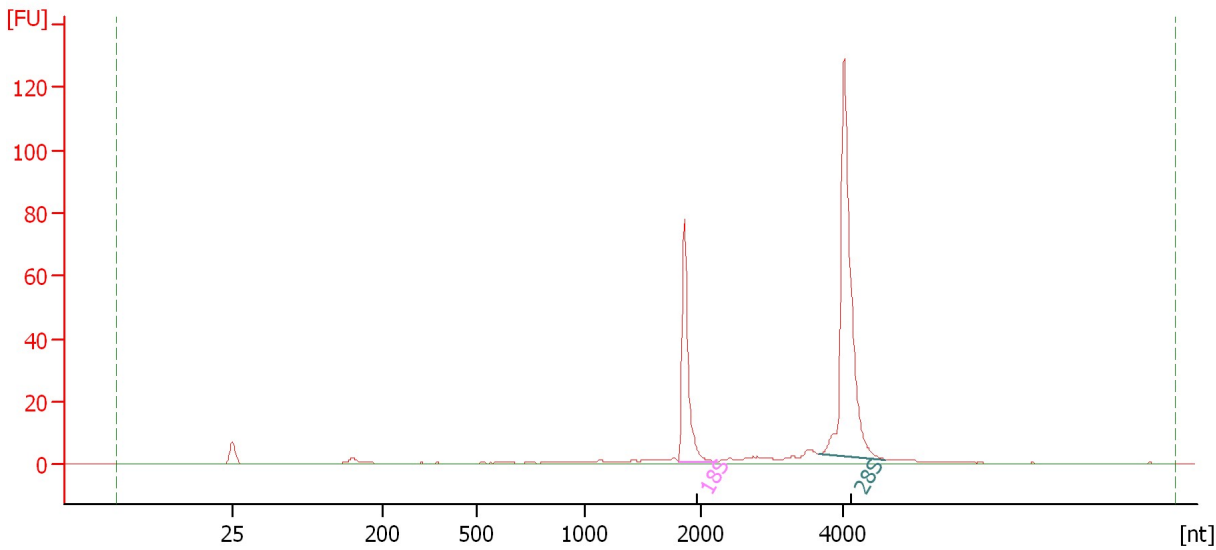


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD410 #6 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 5 : BD410 #6**

RNA Area: 248.3                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 173 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.3              Result Flagging Label: RIN:10

**Fragment table for sample 5 : BD410 #6**

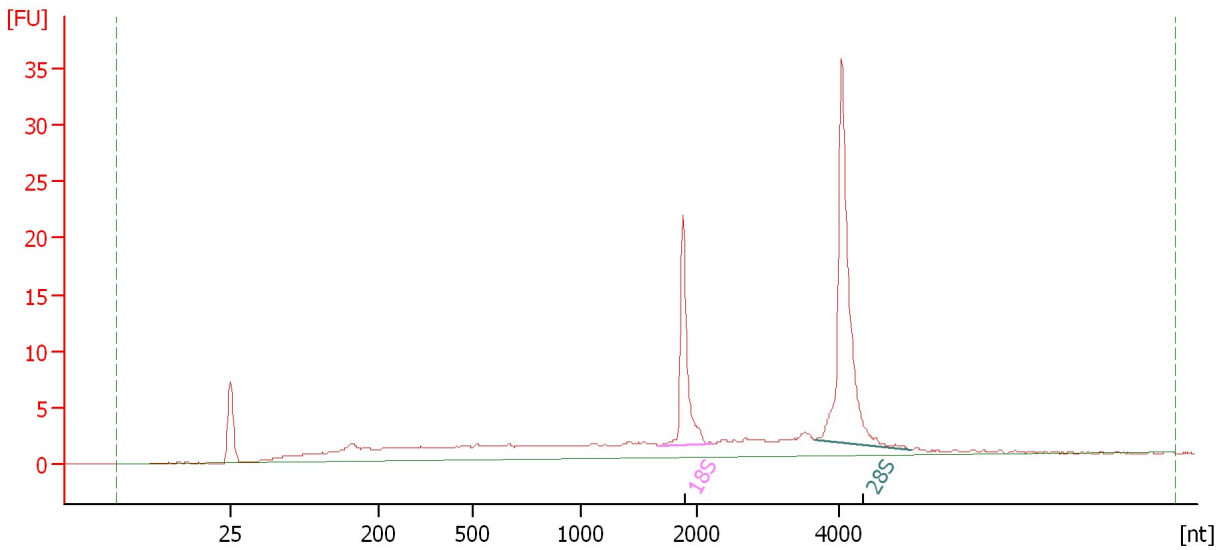
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,801	2,231	57.2	23.0
28S	3,658	4,573	128.8	51.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD410 #7 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 6 : BD410 #7**

RNA Area: 143.7                      RNA Integrity Number (RIN): 8.2 (B.02.08)  
RNA Concentration: 100 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.2              Result Flagging Label: RIN: 8.20

**Fragment table for sample 6 : BD410 #7**

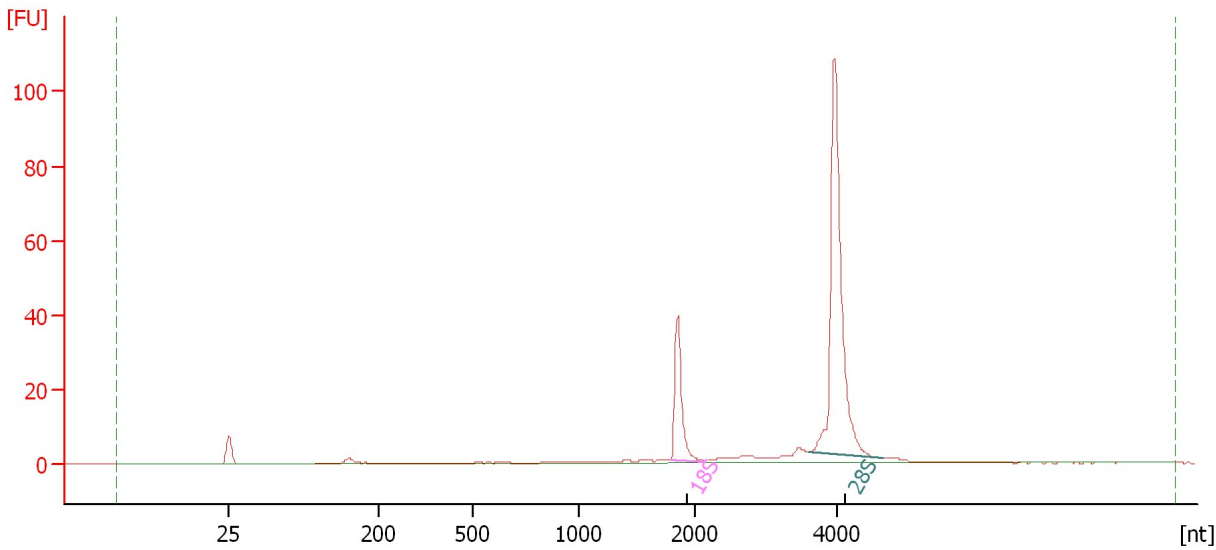
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,669	2,229	17.1	11.9
28S	3,661	5,032	38.1	26.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
 Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD342 #1 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 7 : BD342 #1**

RNA Area:	191.5	RNA Integrity Number (RIN):	9.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	133 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]:	3.7	Result Flagging Label:	RIN: 9.40

**Fragment table for sample 7 : BD342 #1**

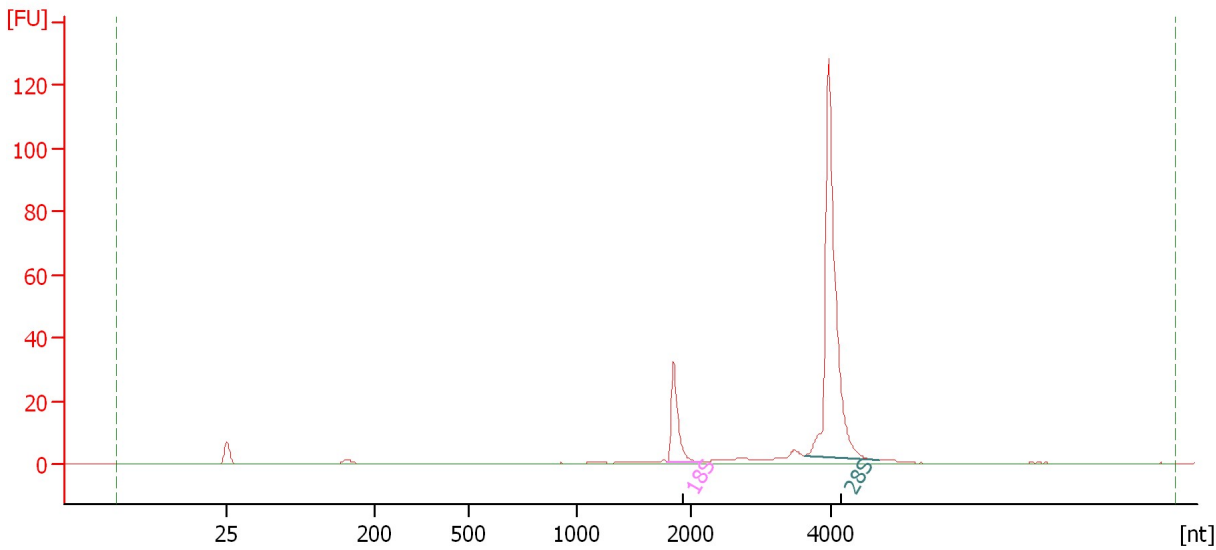
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,796	2,137	29.7	15.5
28S	3,602	4,644	110.9	57.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD342 #2 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 8 : BD342 #2**

RNA Area:	197.3	RNA Integrity Number (RIN):	8.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	137 ng/μl		
rRNA Ratio [28s / 18s]:	5.3	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
		Result Flagging Label:	RIN: 8.70

**Fragment table for sample 8 : BD342 #2**

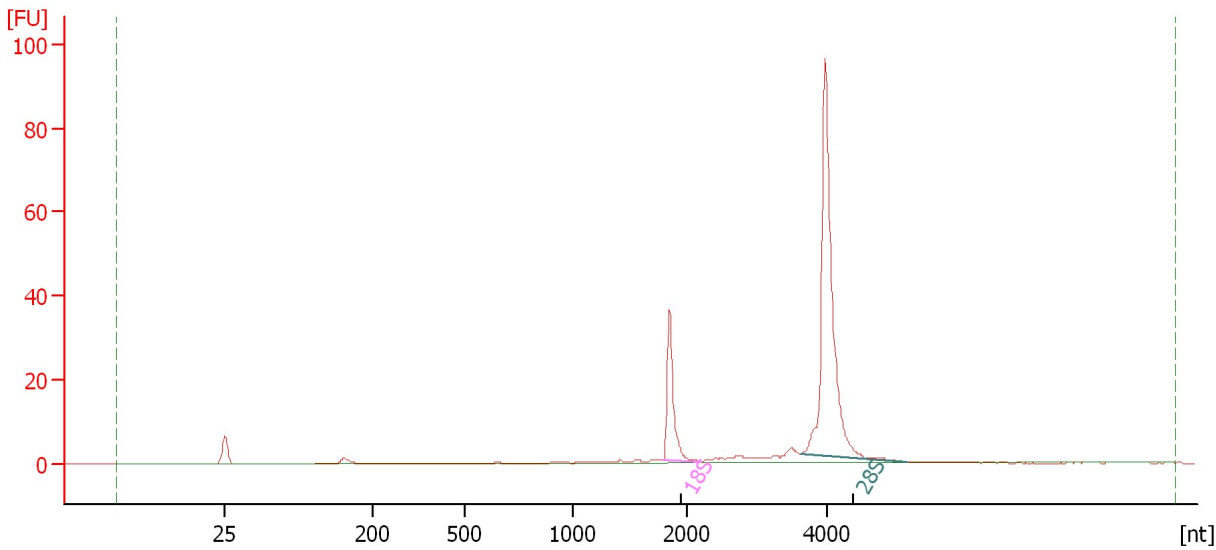
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,793	2,149	24.0	12.2
28S	3,605	4,666	127.8	64.8

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
 Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD342 #3 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 9 : BD342 #3**

RNA Area:	171.5	RNA Integrity Number (RIN):	9.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	119 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]:	3.7	Result Flagging Label:	RIN: 9.50

**Fragment table for sample 9 : BD342 #3**

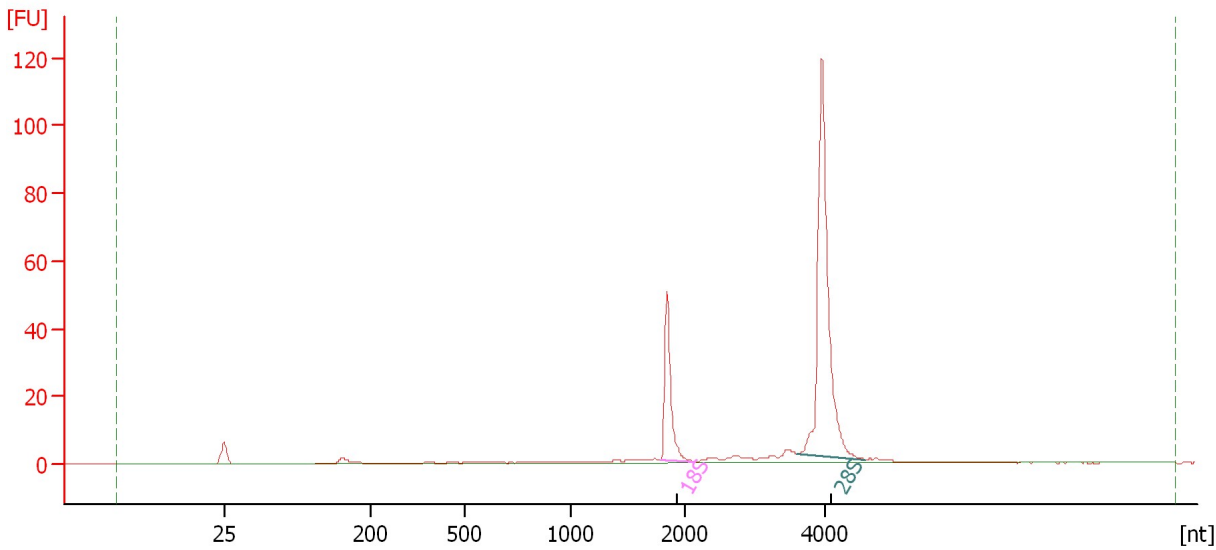
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,790	2,207	27.5	16.0
28S	3,623	5,130	102.3	59.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
 Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD342 #4 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 10 : BD342 #4**

RNA Area:	212.2	RNA Integrity Number (RIN):	9.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	148 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]:	3.1	Result Flagging Label:	RIN: 9.50

**Fragment table for sample 10 : BD342 #4**

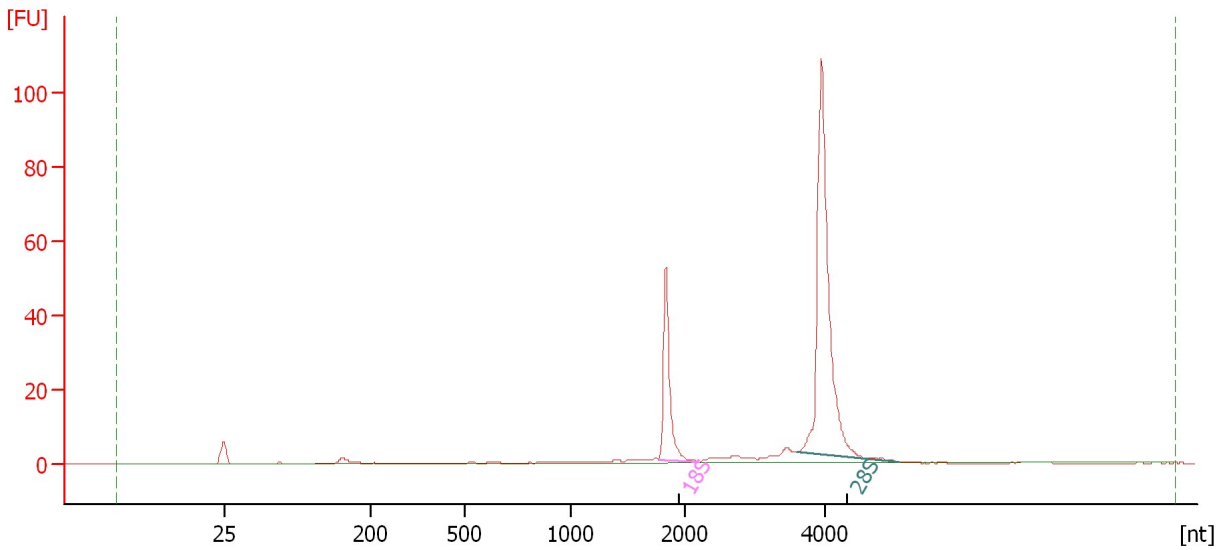
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,789	2,129	38.5	18.2
28S	3,594	4,570	119.4	56.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD342 #5 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 11 : BD342 #5**

RNA Area:	210.3	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	146 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]:	3.0	Result Flagging Label:	RIN: 9.80

**Fragment table for sample 11 : BD342 #5**

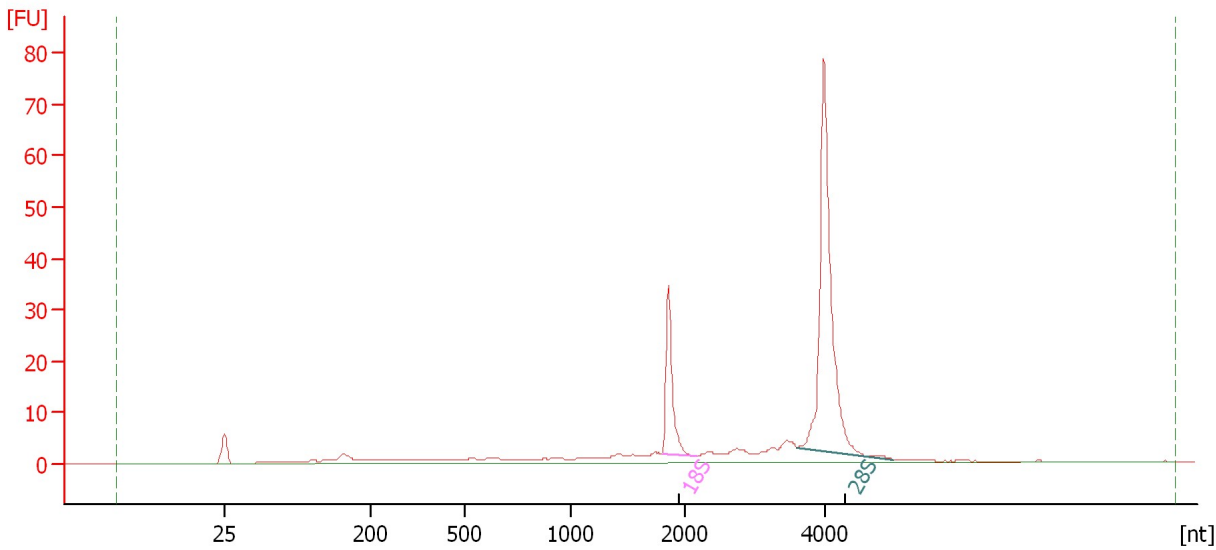
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,779	2,190	40.2	19.1
28S	3,609	5,059	119.7	56.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Electropherogram Summary Continued ...**

BD342 #6 [ HiSeq\_071\_total RNA QC ]



**Overall Results for sample 12 : BD342 #6**

RNA Area: 200.3                      RNA Integrity Number (RIN): 8.8 (B.02.08)  
RNA Concentration: 139 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 3.4                      Result Flagging Label: RIN: 8.80

**Fragment table for sample 12 : BD342 #6**

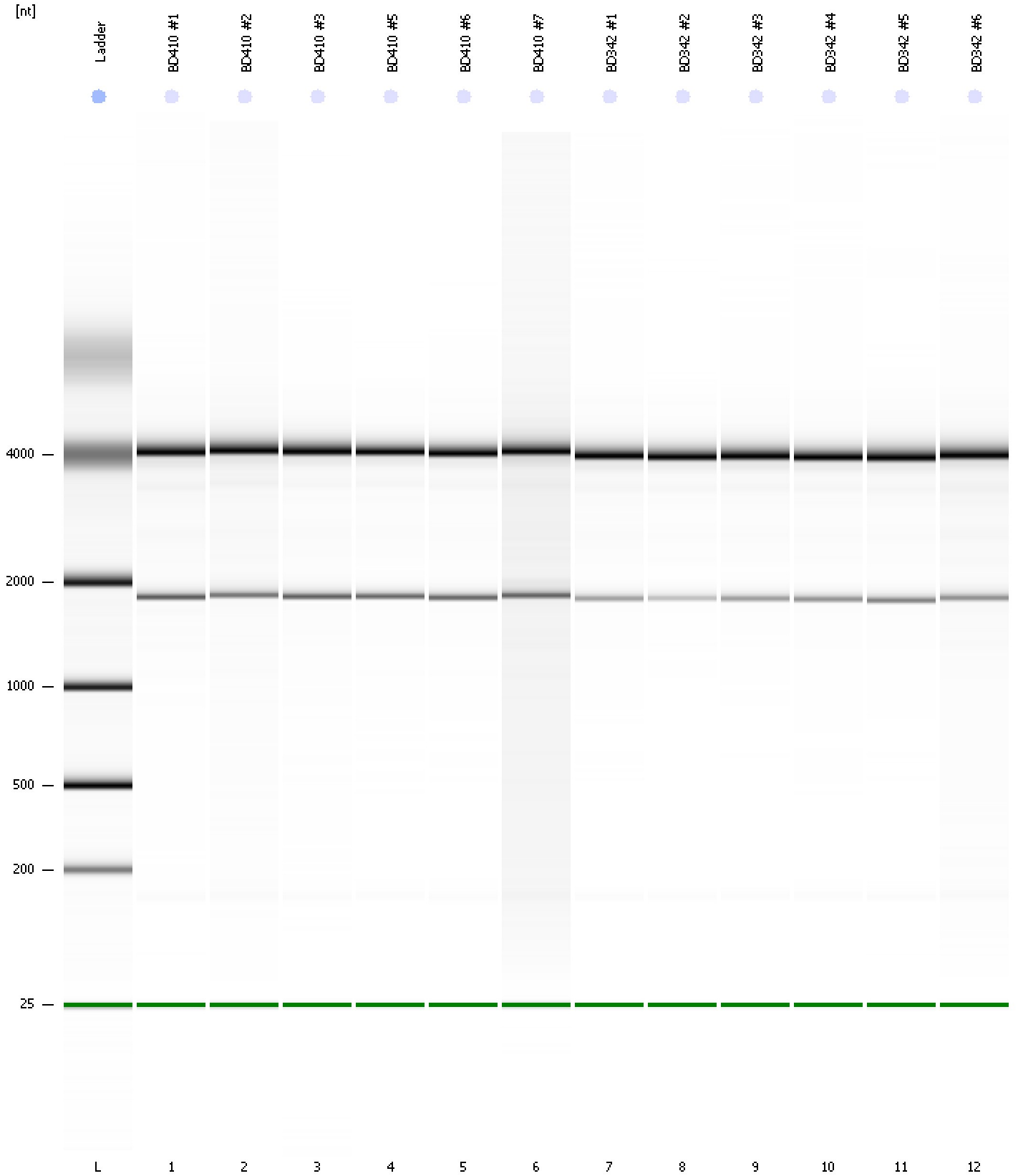
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,798	2,159	25.6	12.8
28S	3,609	4,982	86.6	43.2



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
Modified: 3/11/2015 9:31:09 AM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-10\2015-03-10\_002.xad

Created: 3/10/2015 1:19:00 PM  
 Modified: 3/11/2015 9:31:09 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		3/10/2015 3:42:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-10\2015-03-10_002.xad)		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/10/2015 3:19:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1