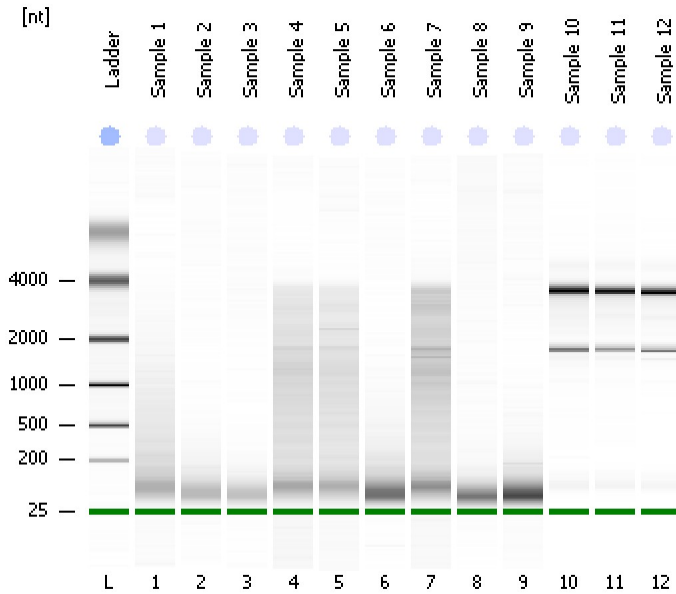


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

Electrophoresis File Run Summary



Instrument Information:

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

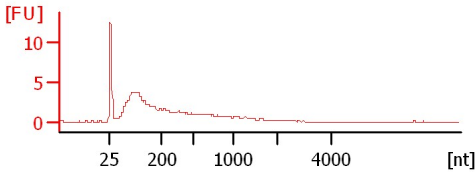
Assay Information:

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.

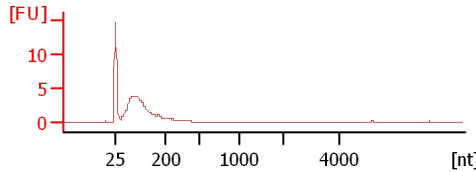
Chip Information:

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

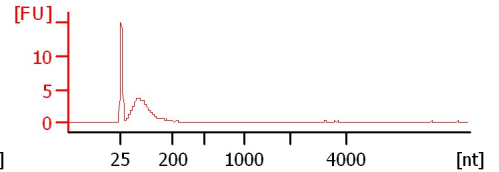
**Sample 1**  
HiSeq251 Total RNA QC  
RIN: 2.30



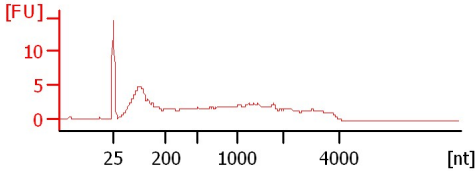
**Sample 2**  
HiSeq251 Total RNA QC  
RIN: 2.30



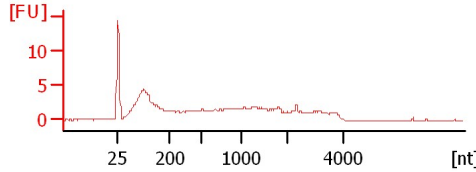
**Sample 3**  
HiSeq251 Total RNA QC  
RIN: 2.30



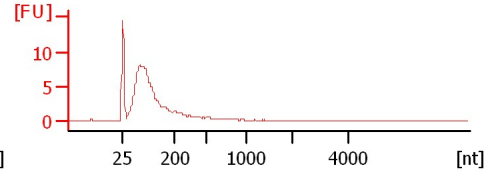
**Sample 4**  
HiSeq251 Total RNA QC  
RIN: 2.50



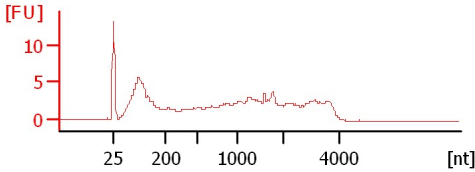
**Sample 5**  
HiSeq251 Total RNA QC  
RIN: 2.50



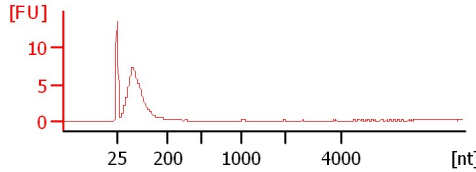
**Sample 6**  
HiSeq251 Total RNA QC  
RIN: 2.50



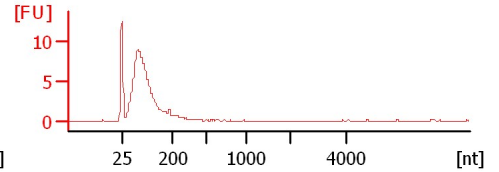
**Sample 7**  
HiSeq251 Total RNA QC  
RIN: 2.80



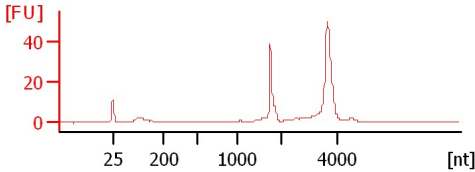
**Sample 8**  
HiSeq251 Total RNA QC  
RIN: 2.60



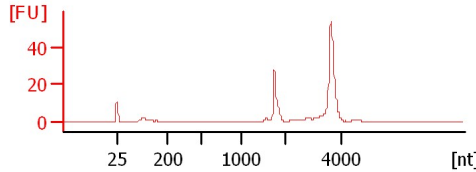
**Sample 9**  
HiSeq251 Total RNA QC  
RIN: 2.70



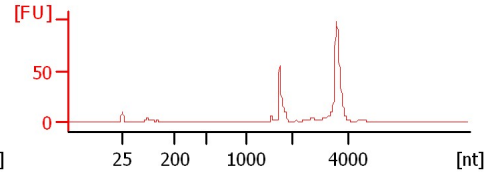
**Sample 10**  
HiSeq251 Total RNA QC  
RIN:10



**Sample 11**  
HiSeq251 Total RNA QC  
RIN: 9.90



**Sample 12**  
HiSeq251 Total RNA QC  
RIN:10



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1	HiSeq251 Total RNA QC	✓	RIN: 2.30	
Sample 2	HiSeq251 Total RNA QC	✓	RIN: 2.30	
Sample 3	HiSeq251 Total RNA QC	✓	RIN: 2.30	
Sample 4	HiSeq251 Total RNA QC	✓	RIN: 2.50	
Sample 5	HiSeq251 Total RNA QC	✓	RIN: 2.50	
Sample 6	HiSeq251 Total RNA QC	✓	RIN: 2.50	
Sample 7	HiSeq251 Total RNA QC	✓	RIN: 2.80	
Sample 8	HiSeq251 Total RNA QC	✓	RIN: 2.60	
Sample 9	HiSeq251 Total RNA QC	✓	RIN: 2.70	
Sample 10	HiSeq251 Total RNA QC	✓	RIN:10	
Sample 11	HiSeq251 Total RNA QC	✓	RIN: 9.90	
Sample 12	HiSeq251 Total RNA QC	✓	RIN:10	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 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/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

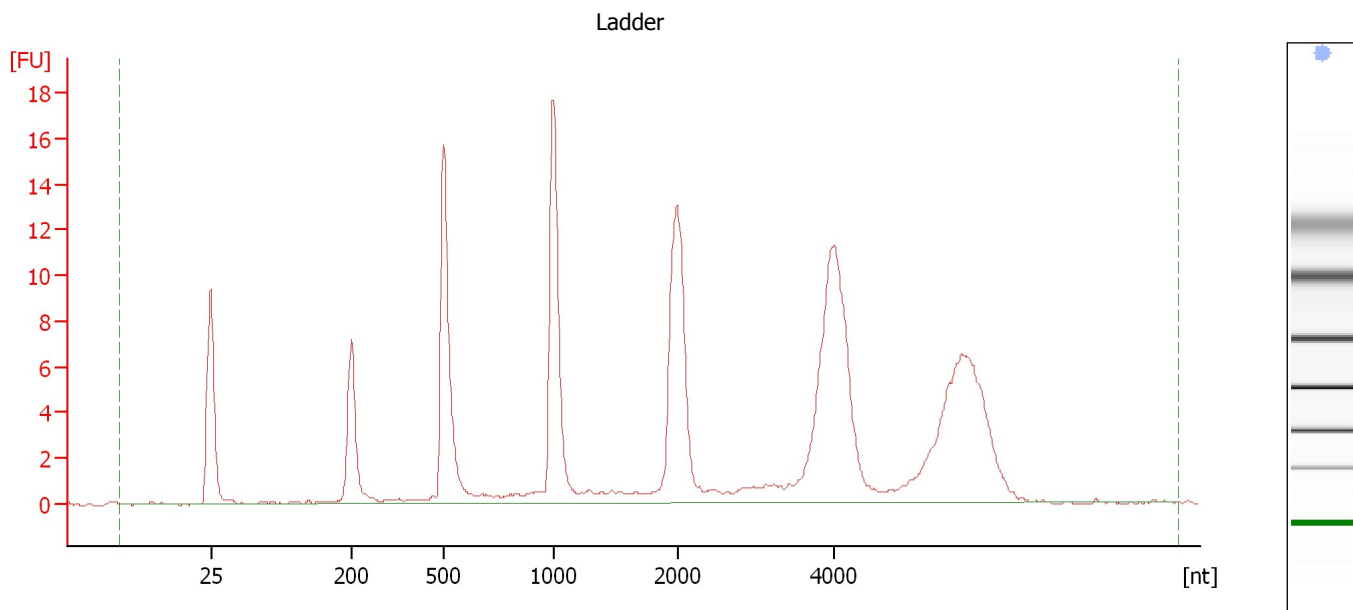
**Ladder**

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\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary**



**Overall Results for Ladder**

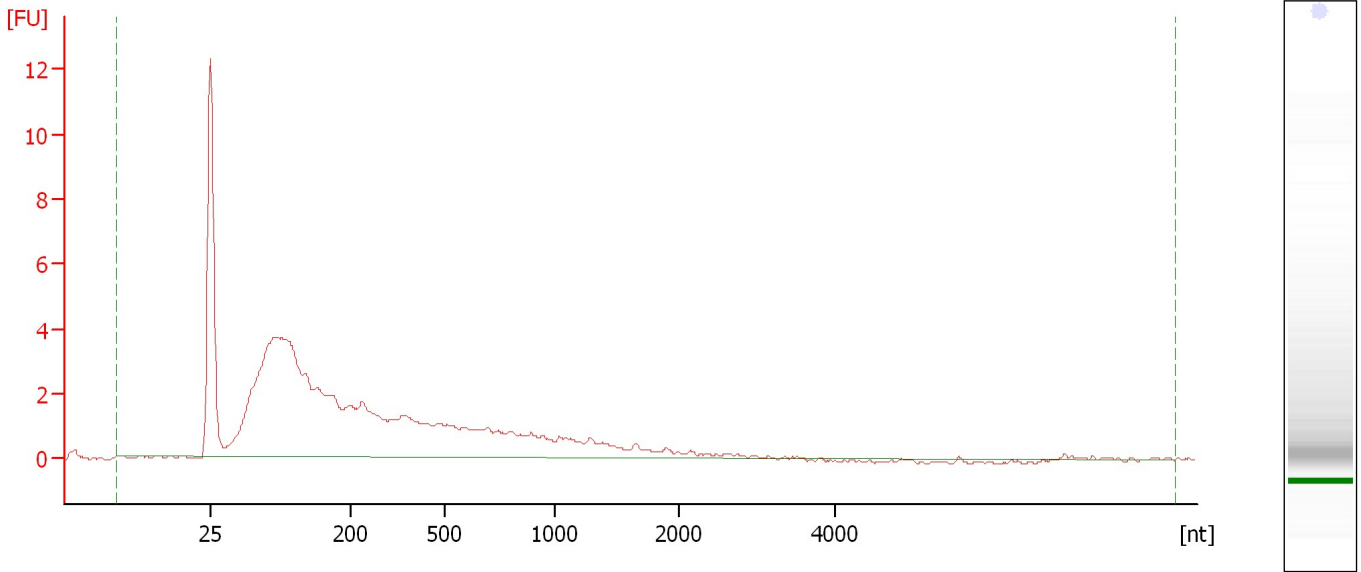
RNA Area:	151.8	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 1 [ HiSeq251 Total RNA QC ]



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

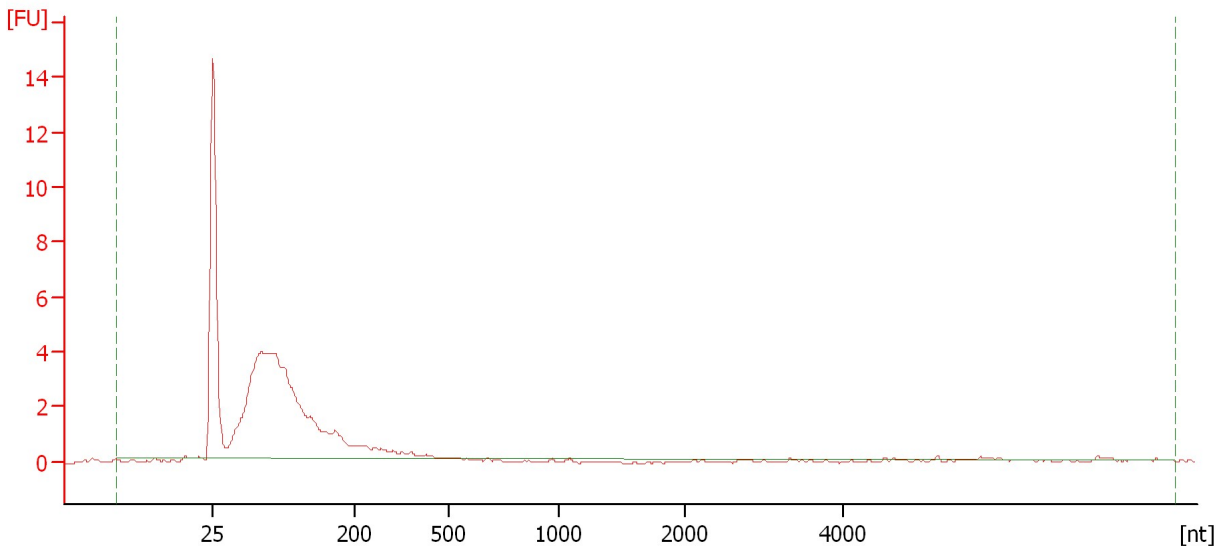
RNA Area:	82.9	RNA Integrity Number (RIN):	2.3 (B.02.08)
RNA Concentration:	82 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.30

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 2 [ HiSeq251 Total RNA QC ]



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

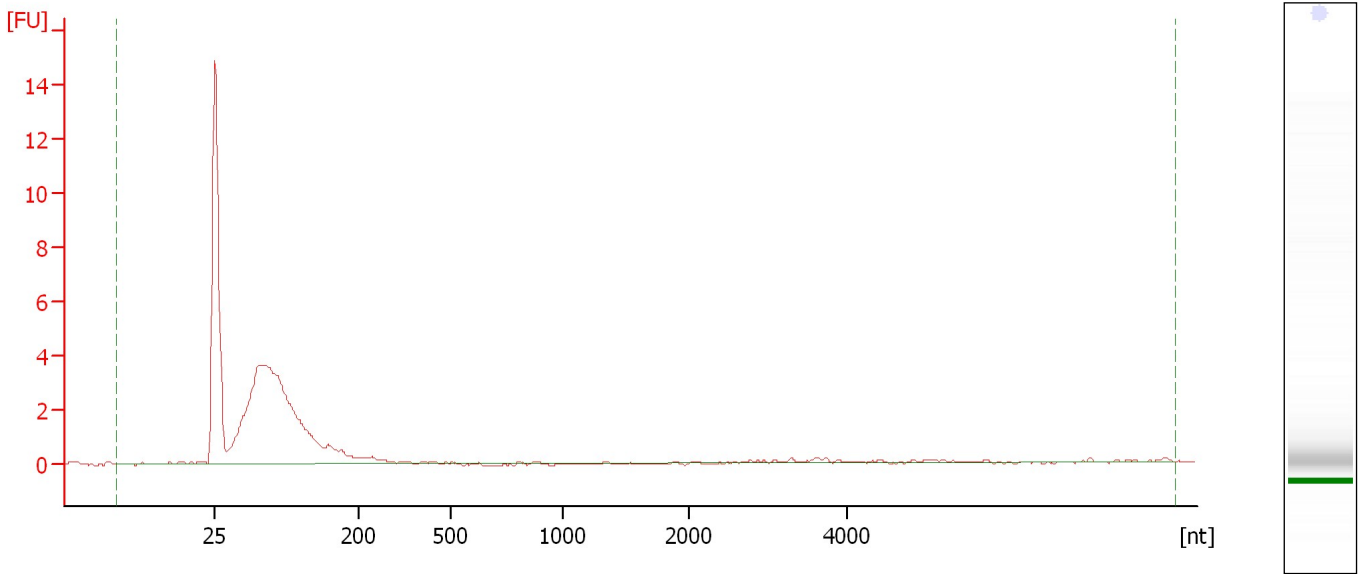
RNA Area:	48.3	RNA Integrity Number (RIN):	2.3 (B.02.08)
RNA Concentration:	48 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.30

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 3 [ HiSeq251 Total RNA QC ]



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

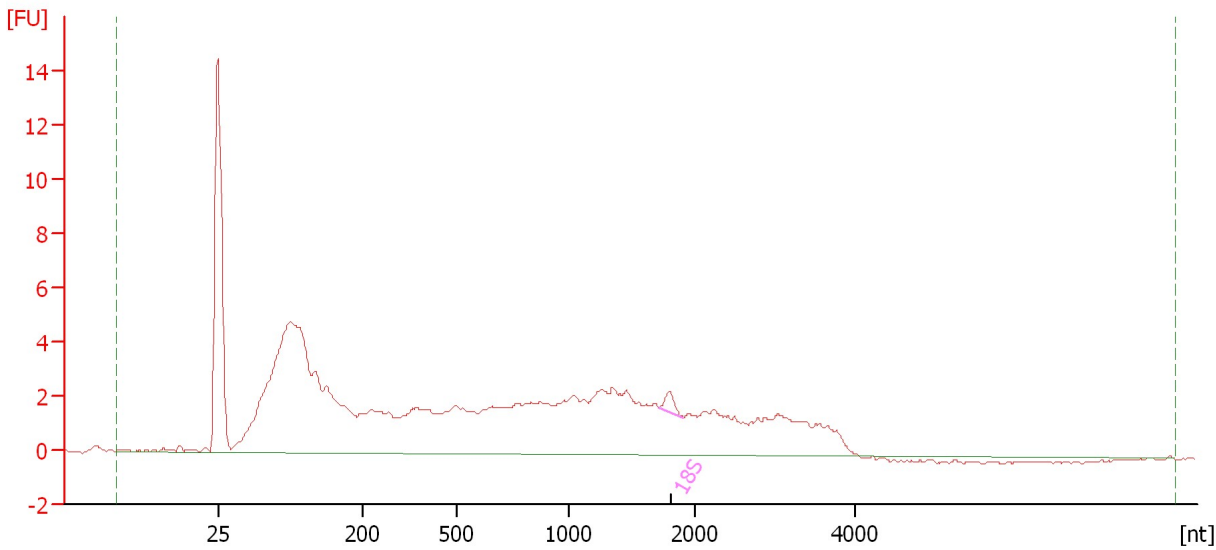
RNA Area:	41.0	RNA Integrity Number (RIN):	2.3 (B.02.08)
RNA Concentration:	41 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.30

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 4 [ HiSeq251 Total RNA QC ]



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

RNA Area:	143.5	RNA Integrity Number (RIN):	2.5 (B.02.08)
RNA Concentration:	142 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

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

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,711	1,905	0.8	0.6

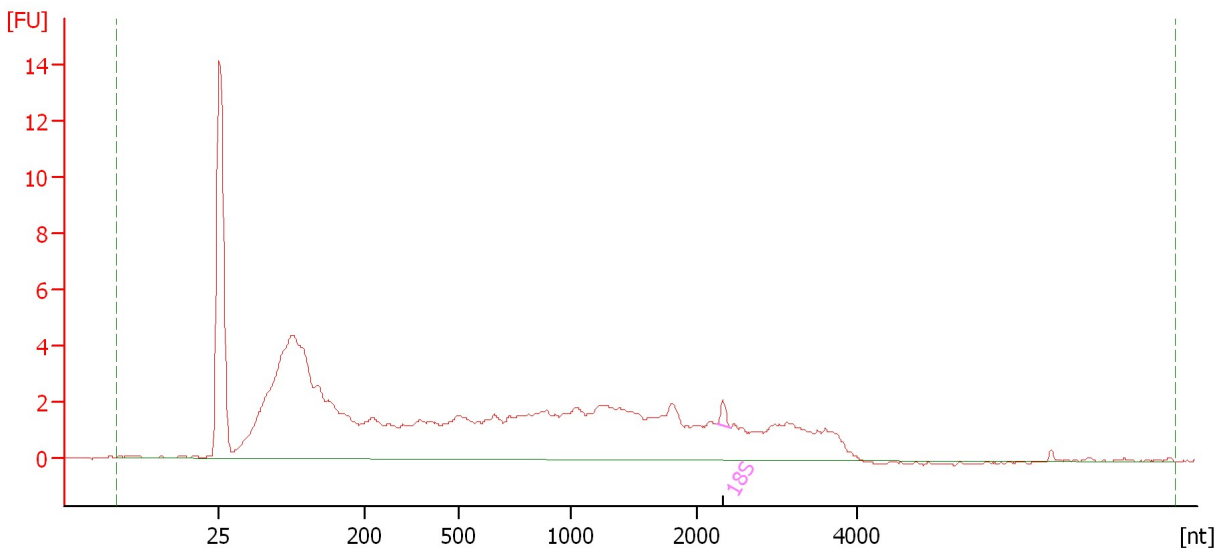


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 5 [ HiSeq251 Total RNA QC ]



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

RNA Area:	125.3	RNA Integrity Number (RIN):	2.5 (B.02.08)
RNA Concentration:	124 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

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

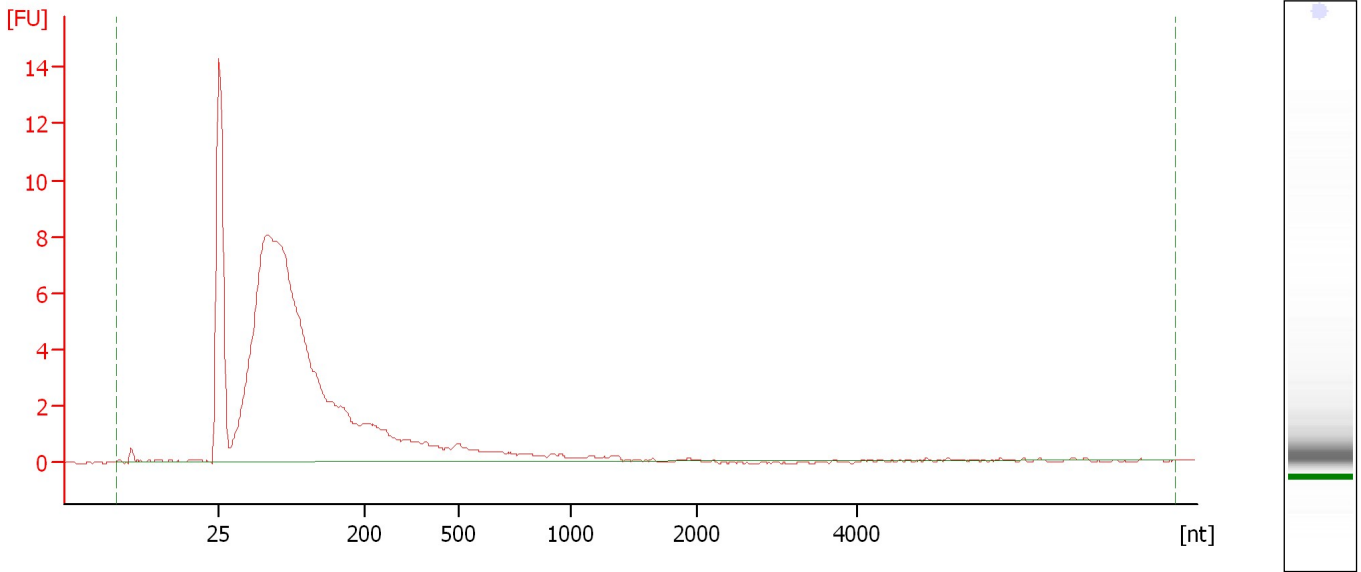
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	2,252	2,413	0.5	0.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 6 [ HiSeq251 Total RNA QC ]



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

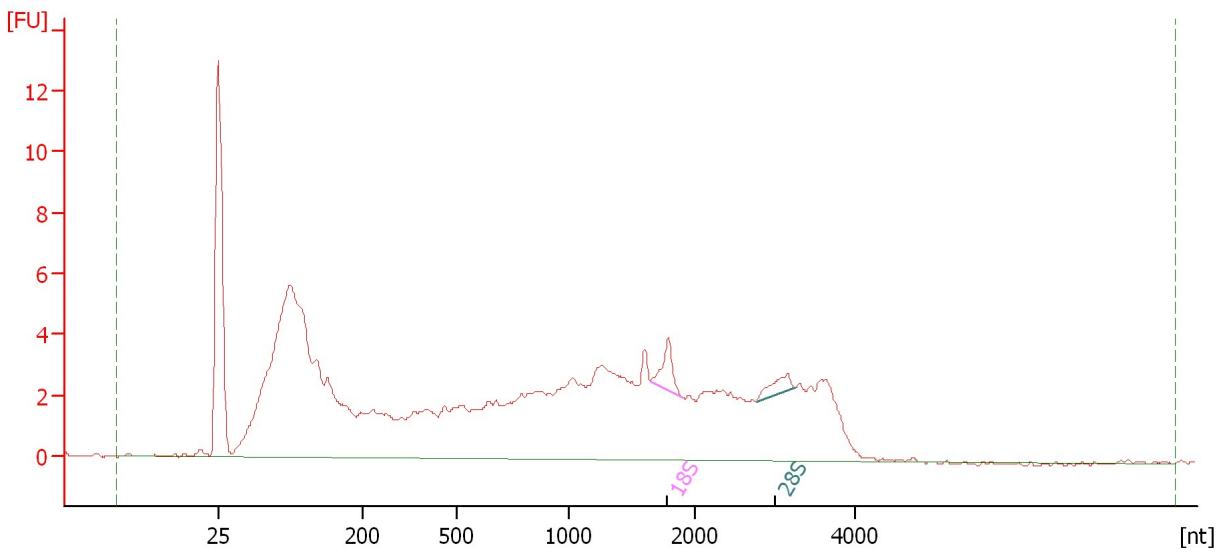
RNA Area:	105.7	RNA Integrity Number (RIN):	2.5 (B.02.08)
RNA Concentration:	104 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.50

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
 Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 7 [ HiSeq251 Total RNA QC ]



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

RNA Area:	176.5	RNA Integrity Number (RIN):	2.8 (B.02.08)
RNA Concentration:	174 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]:	0.6	Result Flagging Label:	RIN: 2.80

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

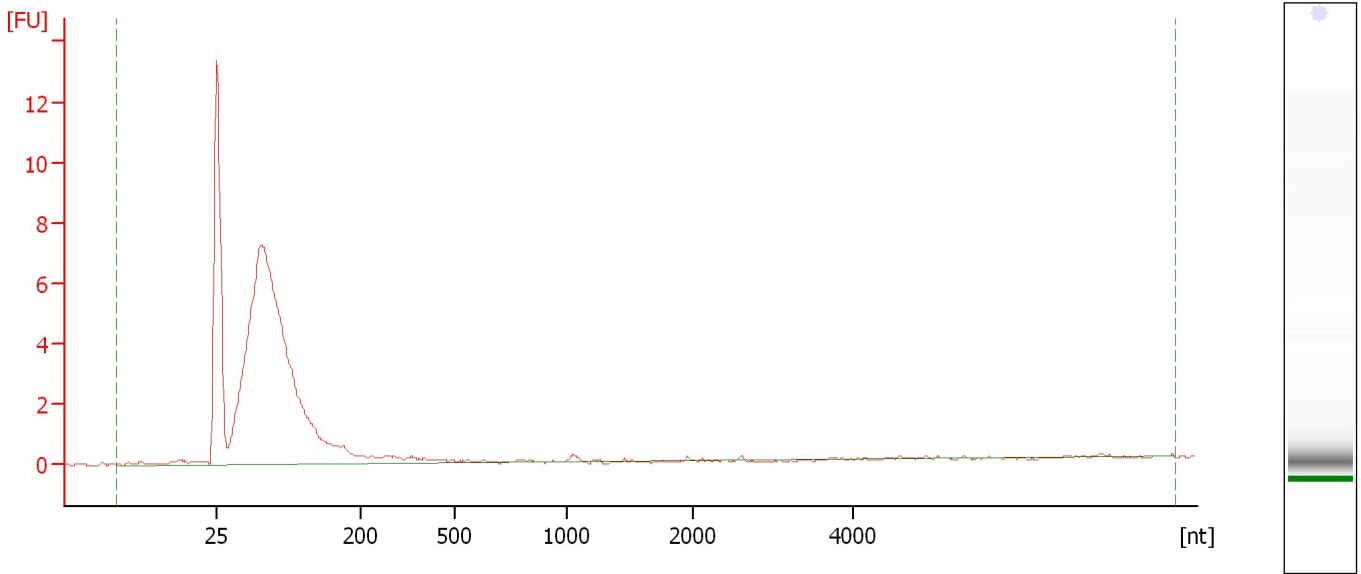
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	1,905	2.1	1.2
28S	2,762	3,258	1.2	0.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 8 [ HiSeq251 Total RNA QC ]



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

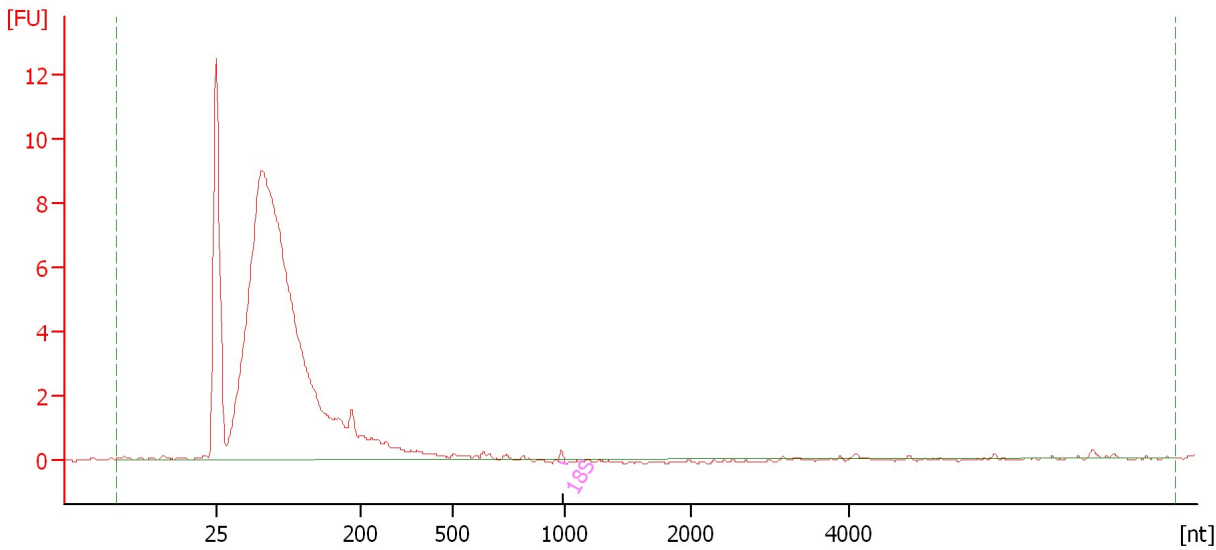
RNA Area:	65.6	RNA Integrity Number (RIN):	2.6 (B.02.08)
RNA Concentration:	65 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.60

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 9 [ HiSeq251 Total RNA QC ]



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

RNA Area:	91.9	RNA Integrity Number (RIN):	2.7 (B.02.08)
RNA Concentration:	91 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: 2.70

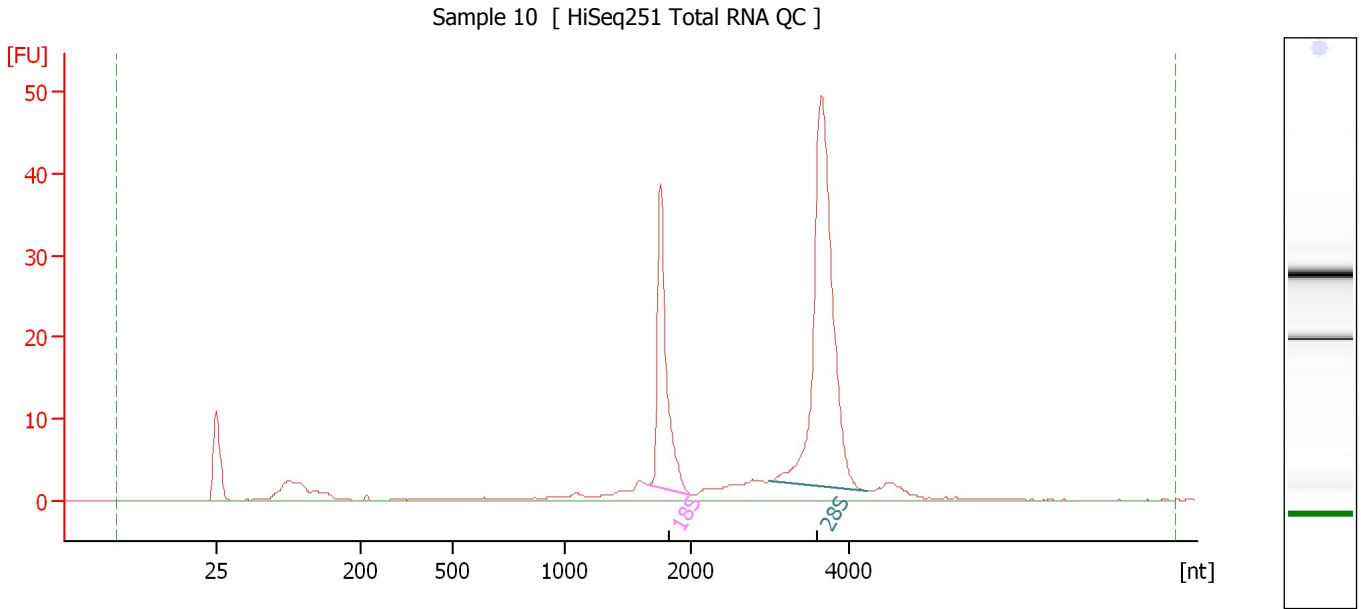
**Fragment table for sample 9 : Sample 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	969	1,013	0.2	0.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**



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

RNA Area:	203.1	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	201 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]:	2.4	Result Flagging Label:	RIN:10

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

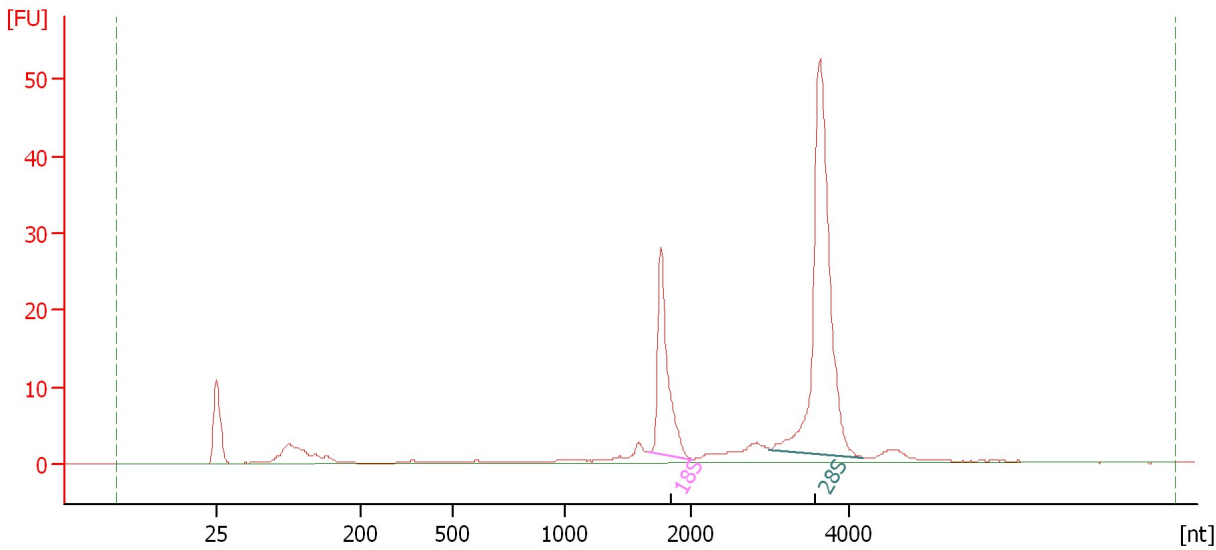
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,657	1,996	37.7	18.6
28S	2,992	4,204	91.9	45.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 11 [ HiSeq251 Total RNA QC ]



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

RNA Area: 174.2                      RNA Integrity Number (RIN): 9.9 (B.02.08)  
RNA Concentration: 172 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.7                      Result Flagging Label: RIN: 9.90

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

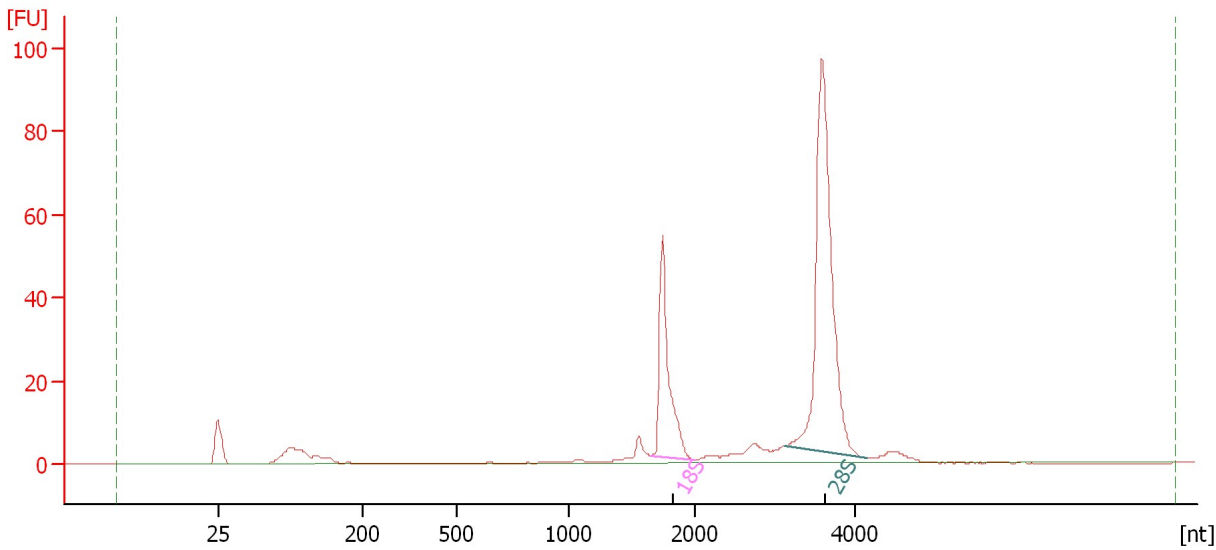
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,657	2,022	30.6	17.6
28S	2,992	4,177	83.7	48.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Electropherogram Summary Continued ...**

Sample 12 [ HiSeq251 Total RNA QC ]



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

RNA Area:	292.1	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	289 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]:	2.6	Result Flagging Label:	RIN:10

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

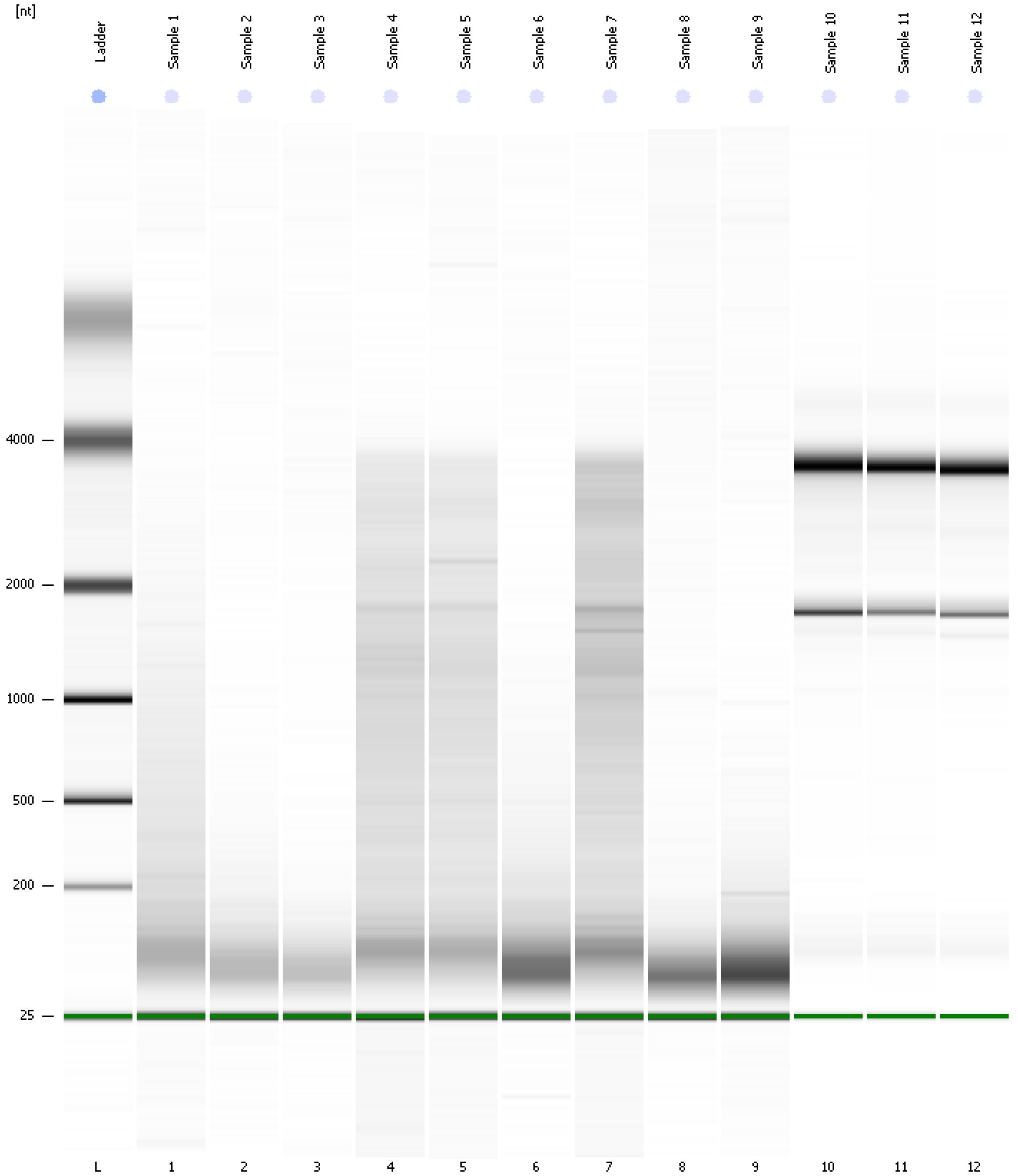
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	1,998	56.4	19.3
28S	3,124	4,143	149.1	51.0



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Gel Image**

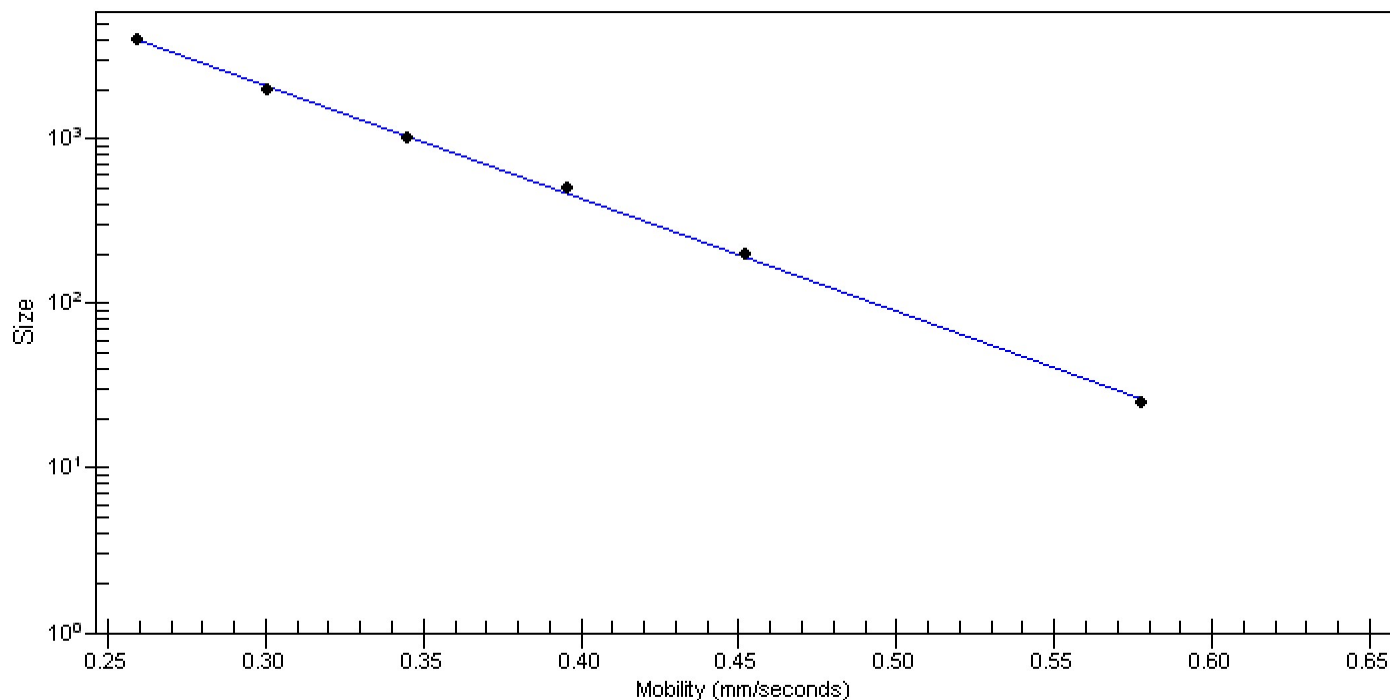


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
Modified: 9/21/2015 10:33:11 AM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-21\2015-09-21\_001.xad

Created: 9/21/2015 9:33:13 AM  
 Modified: 9/21/2015 10:33:11 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		9/21/2015 9:57:16 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-09-21\2015-09-21_001.xad)		Instrument	Run		9/21/2015 9:33:19 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/21/2015 9:33:19 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/21/2015 9:33:19 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/21/2015 9:33:19 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/21/2015 9:33:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/21/2015 9:33:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/21/2015 9:33:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1