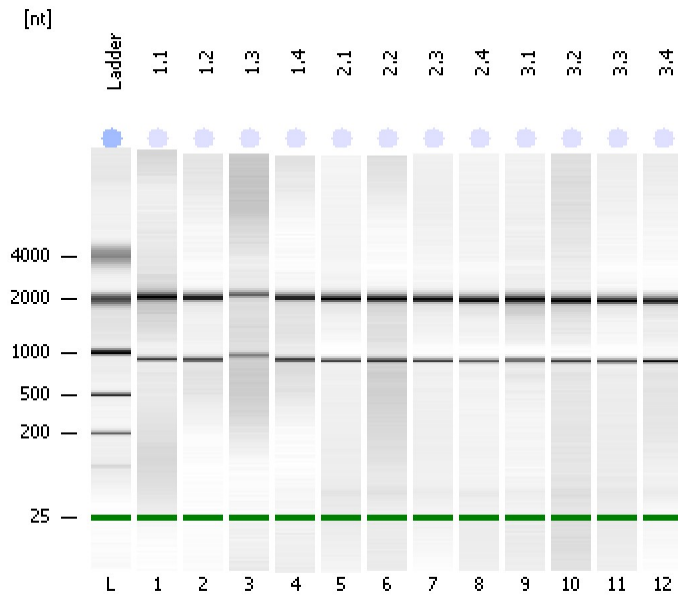


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

Electrophoresis File Run Summary



Instrument Information:

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

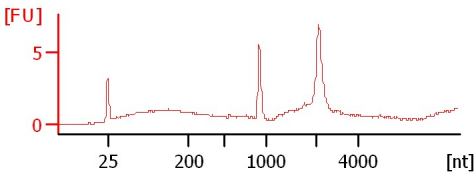
Assay Information:

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.

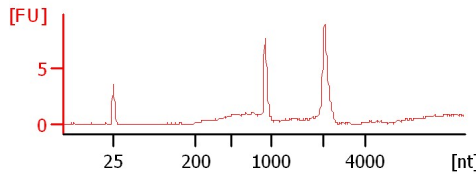
Chip Information:

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

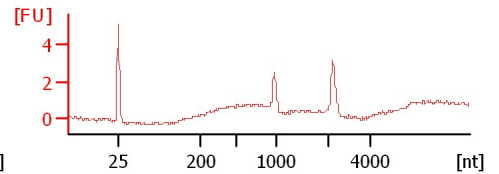
**1.1**  
RIN: 7.10



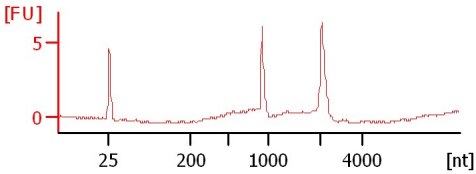
**1.2**  
RIN: 7.90



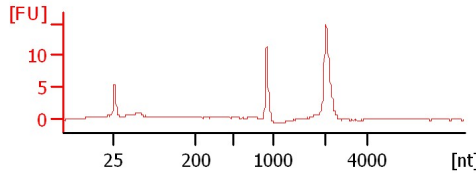
**1.3**  
sample not denatured  
RIN: 7.10



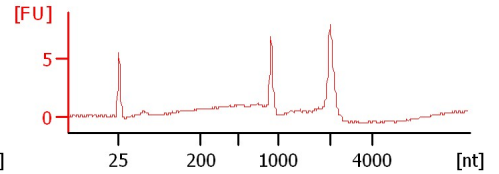
**1.4**  
RIN: 8.20



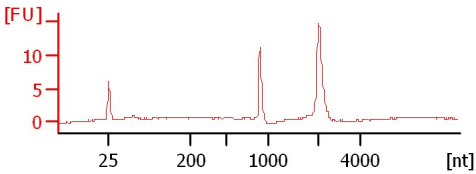
**2.1**  
RIN: 9.60



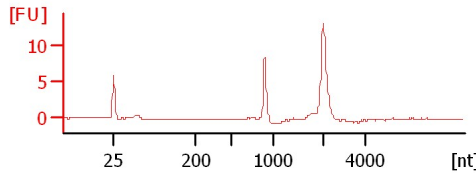
**2.2**  
RIN: 7



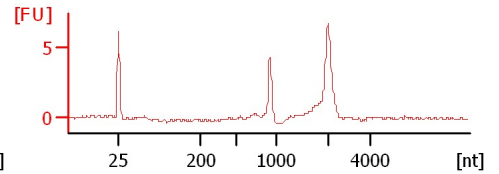
**2.3**  
RIN: 8.40



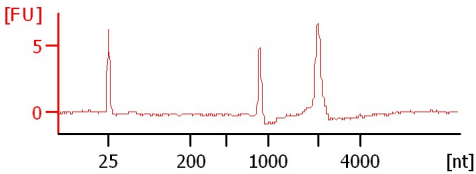
**2.4**  
RIN: 10



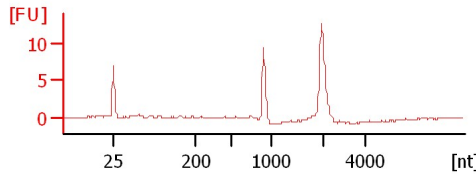
**3.1**  
RIN: 10



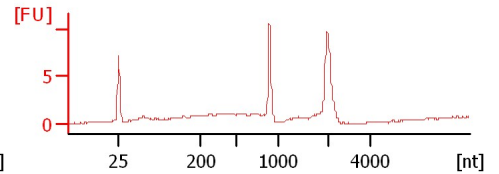
**3.2**  
RIN: 10



**3.3**  
RIN: 8.90



**3.4**  
RIN: 7.20



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
1.1		✓	RIN: 7.10	
1.2		✓	RIN: 7.90	
1.3	sample not denatured	✓	RIN: 7.10	
1.4		✓	RIN: 8.20	
2.1		✓	RIN: 9.60	
2.2		✓	RIN:7	
2.3		✓	RIN: 8.40	
2.4		✓	RIN:10	
3.1		✓	RIN:10	
3.2		✓	RIN:10	
3.3		✓	RIN: 8.90	
3.4		✓	RIN: 7.20	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 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

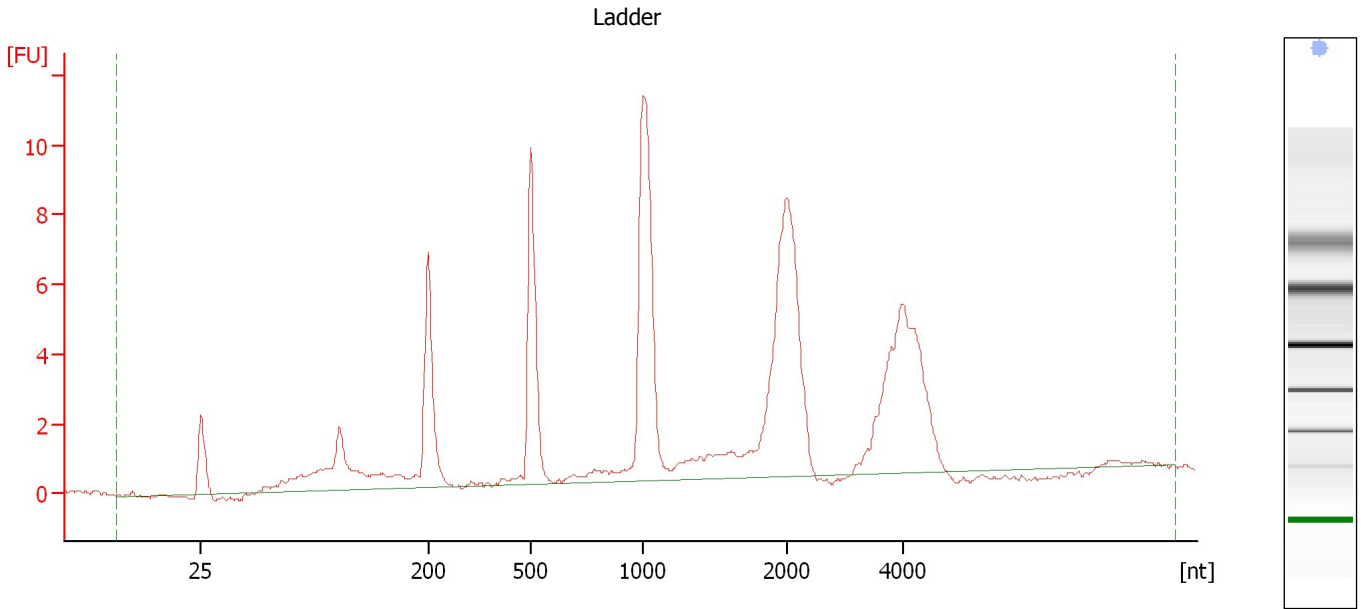
**Ladder**

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary**



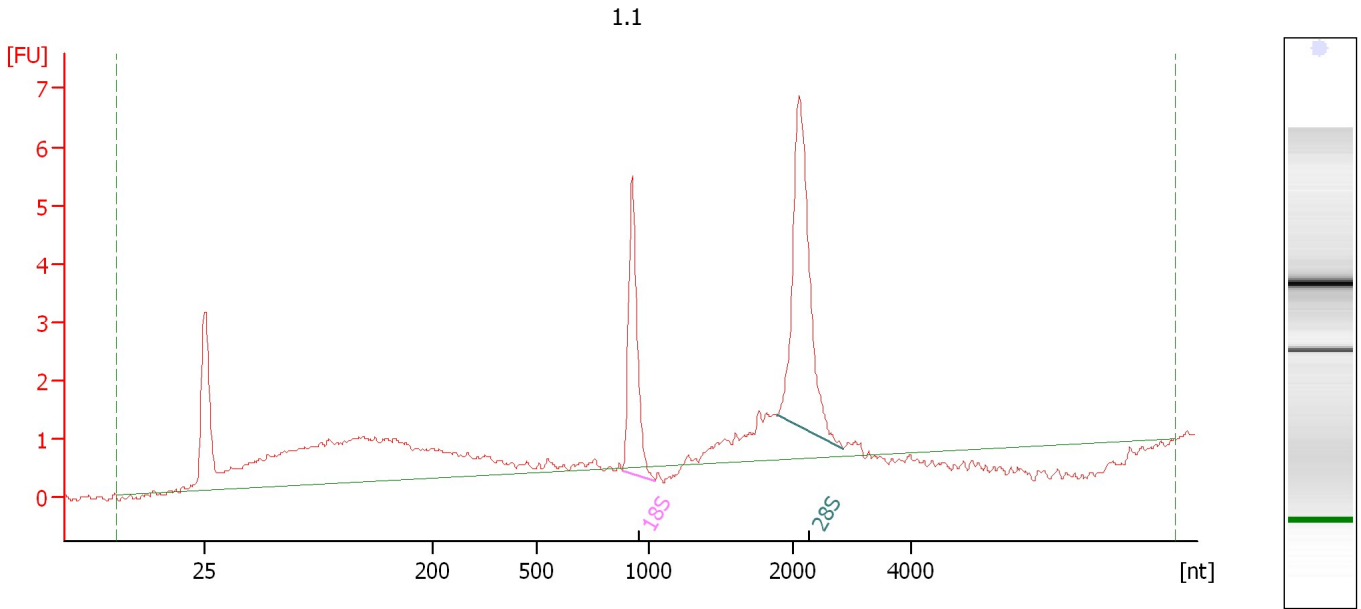
**Overall Results for Ladder**

RNA Area:	92.5	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:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 1.1**

RNA Area:	46.0	RNA Integrity Number (RIN):	7.1 (B.02.08)
RNA Concentration:	75 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]:	1.9	Result Flagging Label:	RIN: 7.10

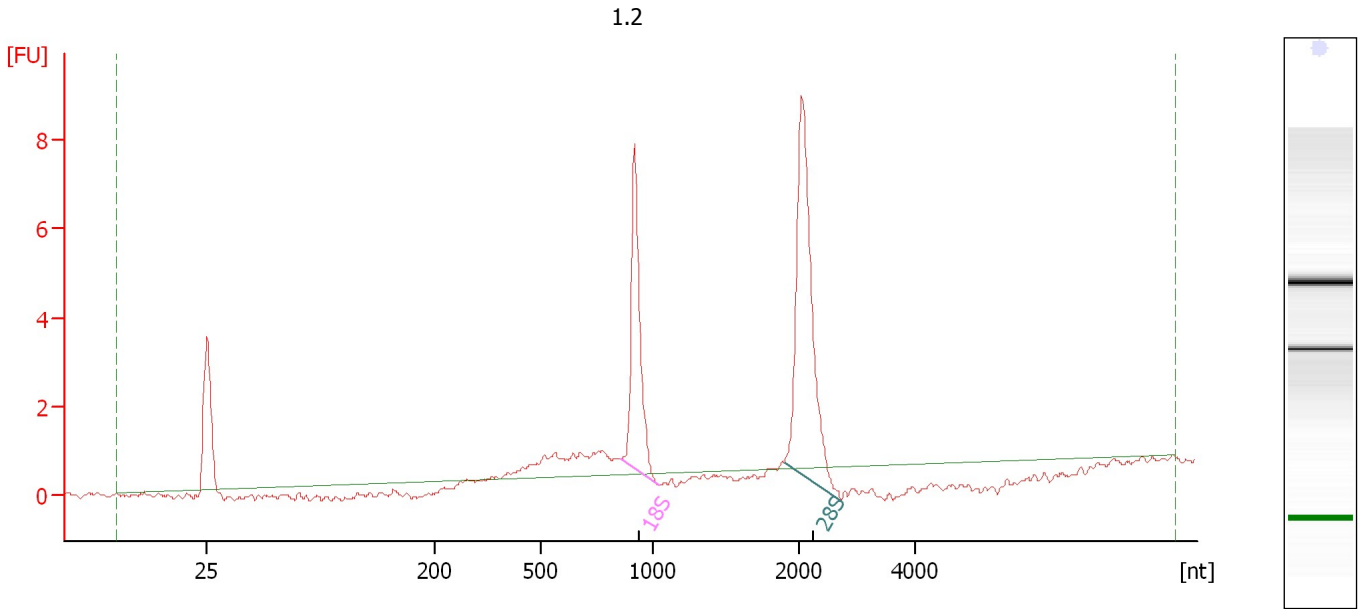
**Fragment table for sample 1 : 1.1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	878	1,039	5.3	11.6
28S	1,877	2,837	9.9	21.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 1.2**

RNA Area:	26.1	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	42 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: 7.90

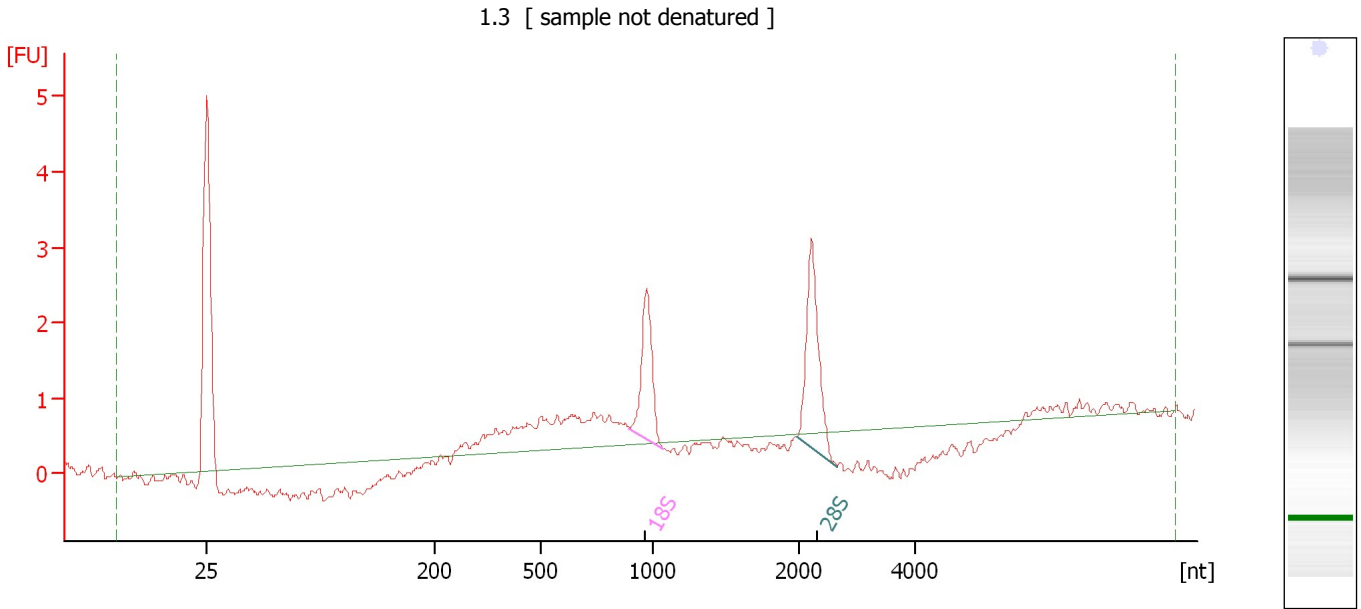
**Fragment table for sample 2 : 1.2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	856	1,033	7.8	30.0
28S	1,905	2,735	13.4	51.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 1.3**

RNA Area:	13.0	RNA Integrity Number (RIN):	7.1 (B.02.08)
RNA Concentration:	21 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: 7.10

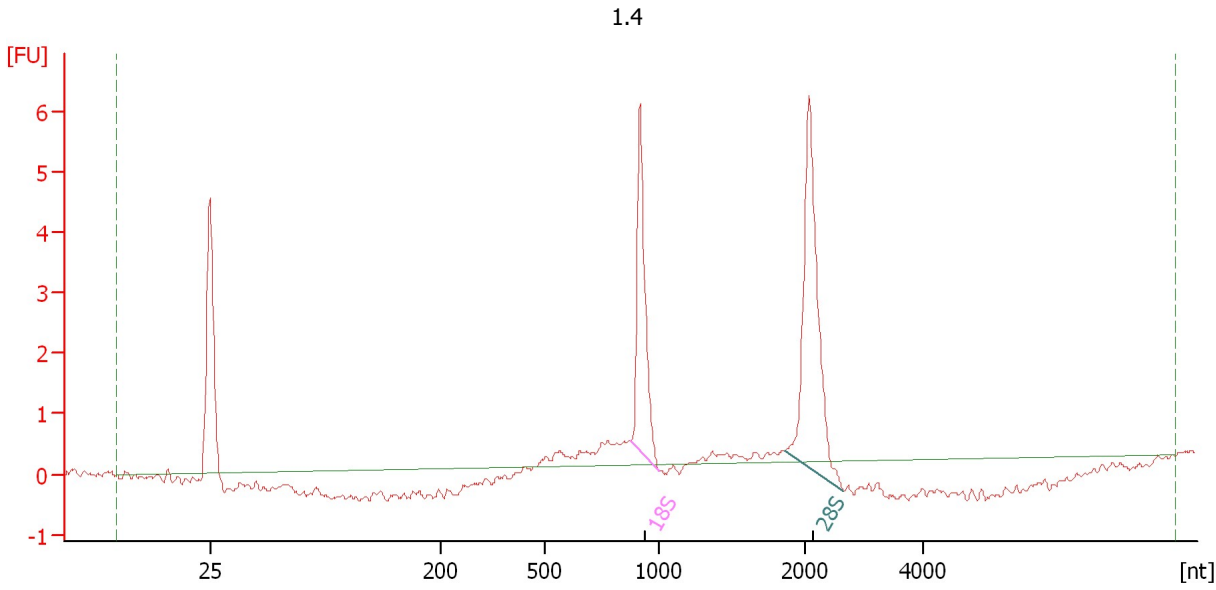
**Fragment table for sample 3 : 1.3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	894	1,056	2.5	19.1
28S	1,993	2,662	3.5	26.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 1.4**

RNA Area:	18.2	RNA Integrity Number (RIN):	8.2 (B.02.08)
RNA Concentration:	29 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: 8.20

**Fragment table for sample 4 : 1.4**

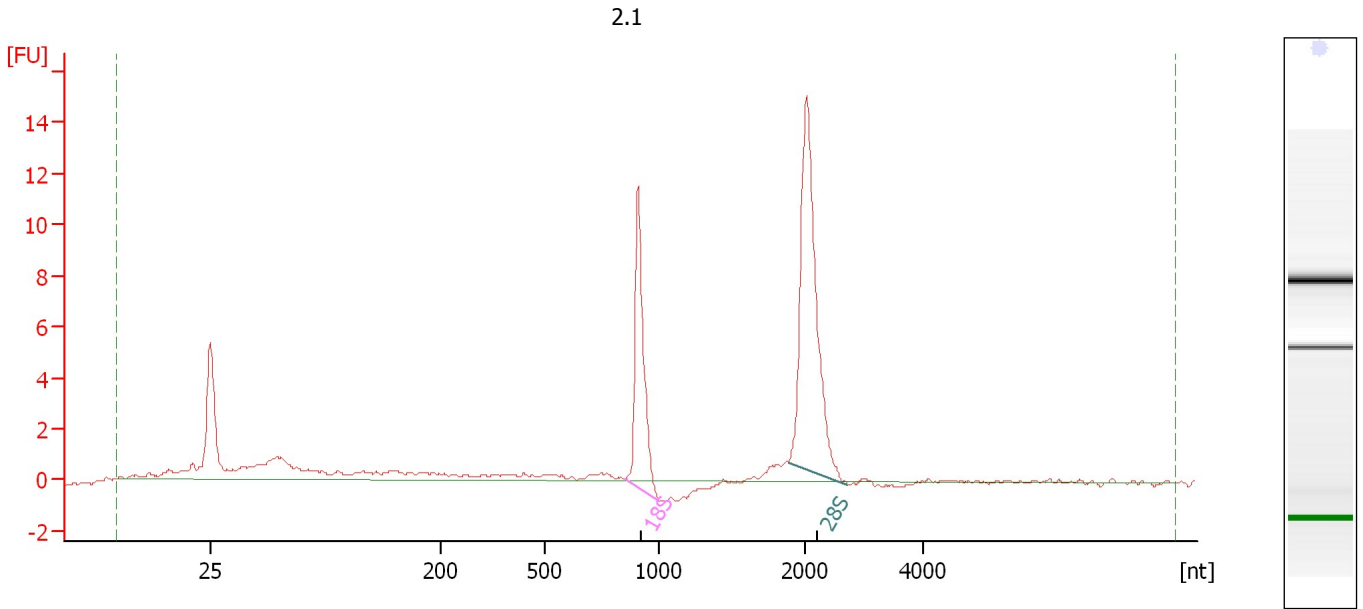
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	873	995	5.5	30.5
28S	1,858	2,649	8.9	49.0



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 2.1**

RNA Area:	59.1	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	96 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]:	1.9	Result Flagging Label:	RIN: 9.60

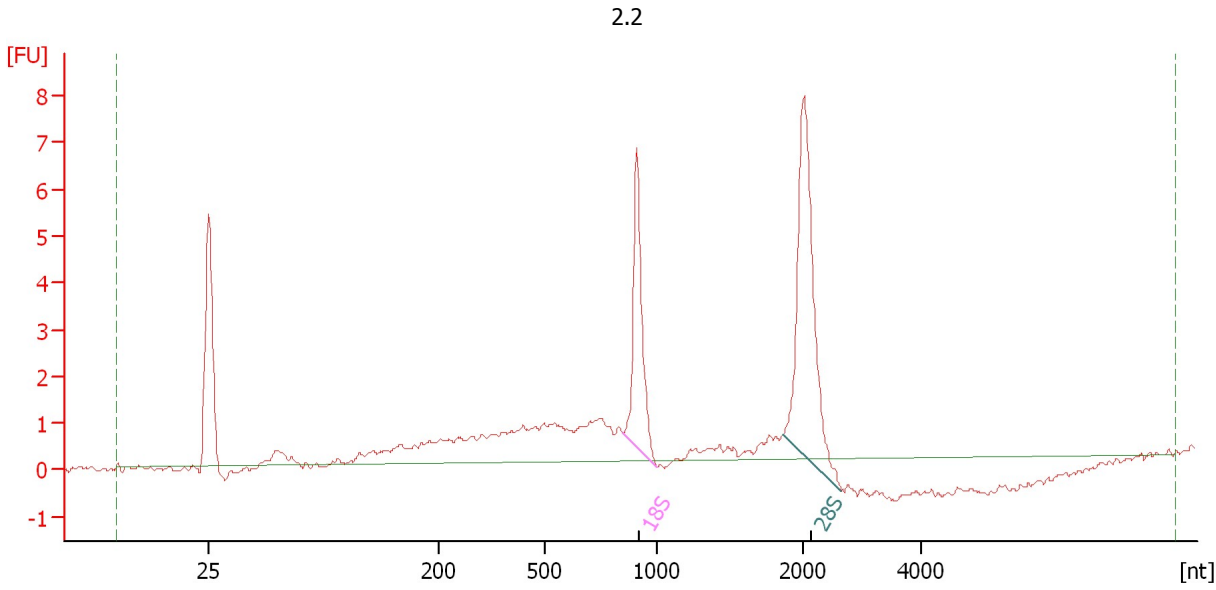
**Fragment table for sample 5 : 2.1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	849	999	12.4	21.0
28S	1,880	2,721	23.3	39.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 2.2**

RNA Area:	42.2	RNA Integrity Number (RIN):	7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	68 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]:	1.9	Result Flagging Label:	RIN:7

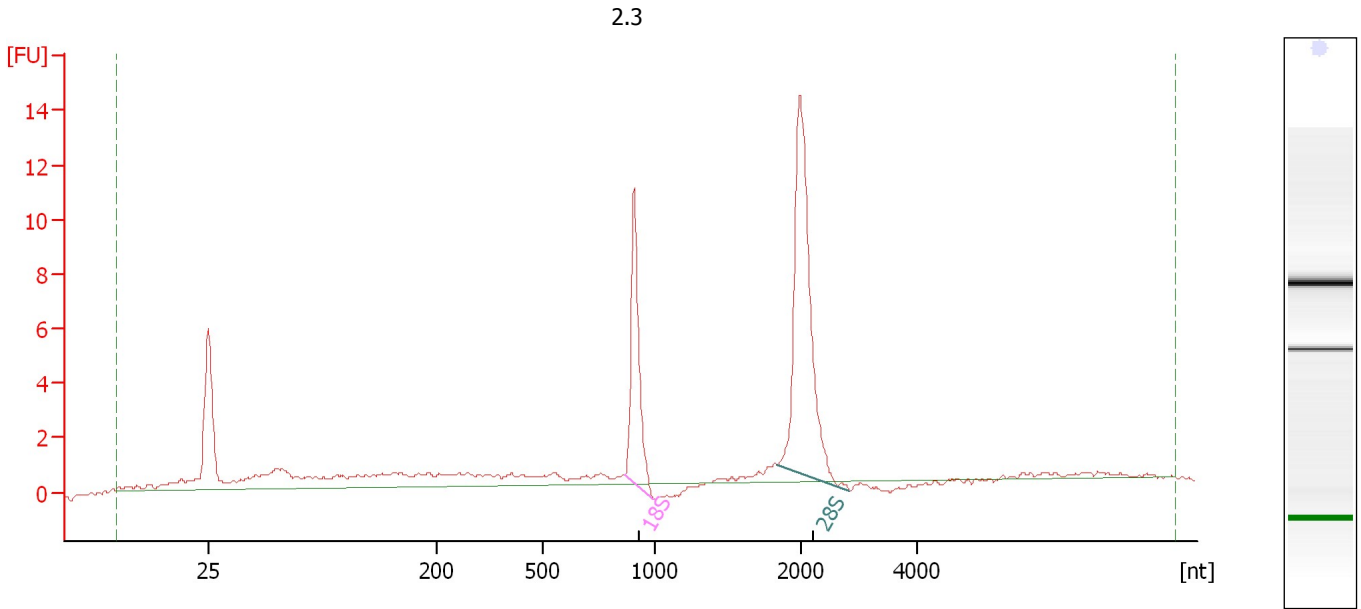
**Fragment table for sample 6 : 2.2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	849	999	6.8	16.1
28S	1,866	2,653	12.6	29.9

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 2.3**

RNA Area:	61.0	RNA Integrity Number (RIN):	8.4 (B.02.08)
RNA Concentration:	99 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: 8.40

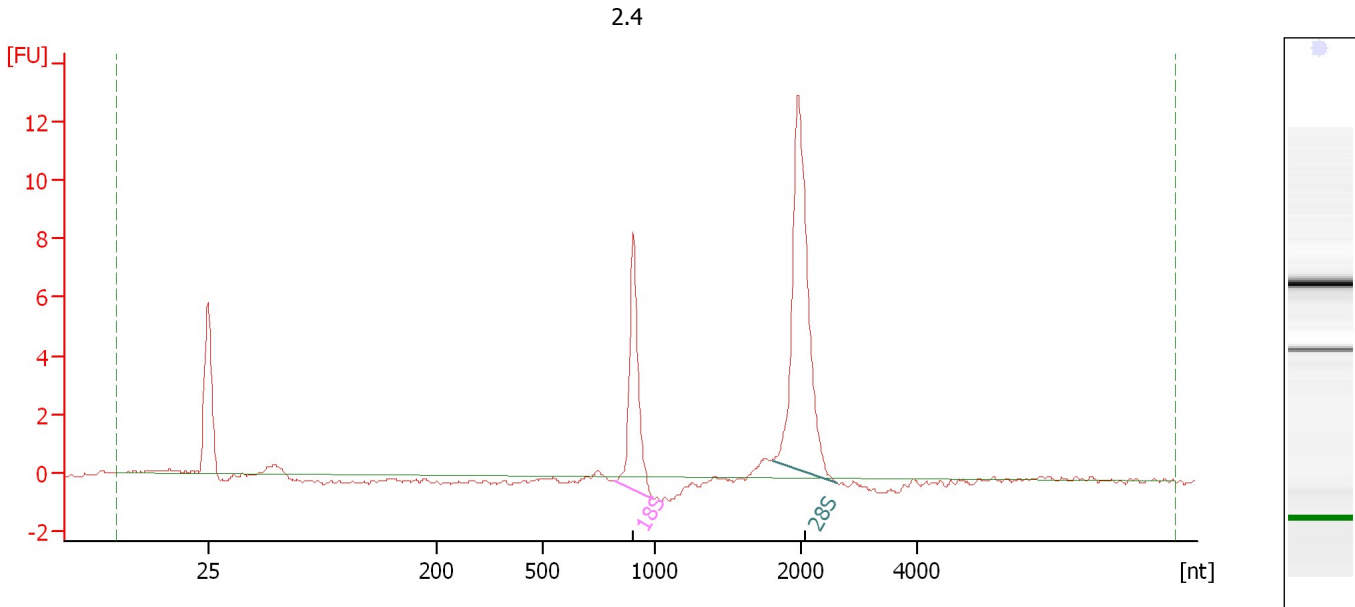
**Fragment table for sample 7 : 2.3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	866	989	10.6	17.5
28S	1,830	2,840	22.8	37.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 2.4**

RNA Area:	33.2	RNA Integrity Number (RIN):	10 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	54 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]:	2.2	Result Flagging Label:	RIN:10

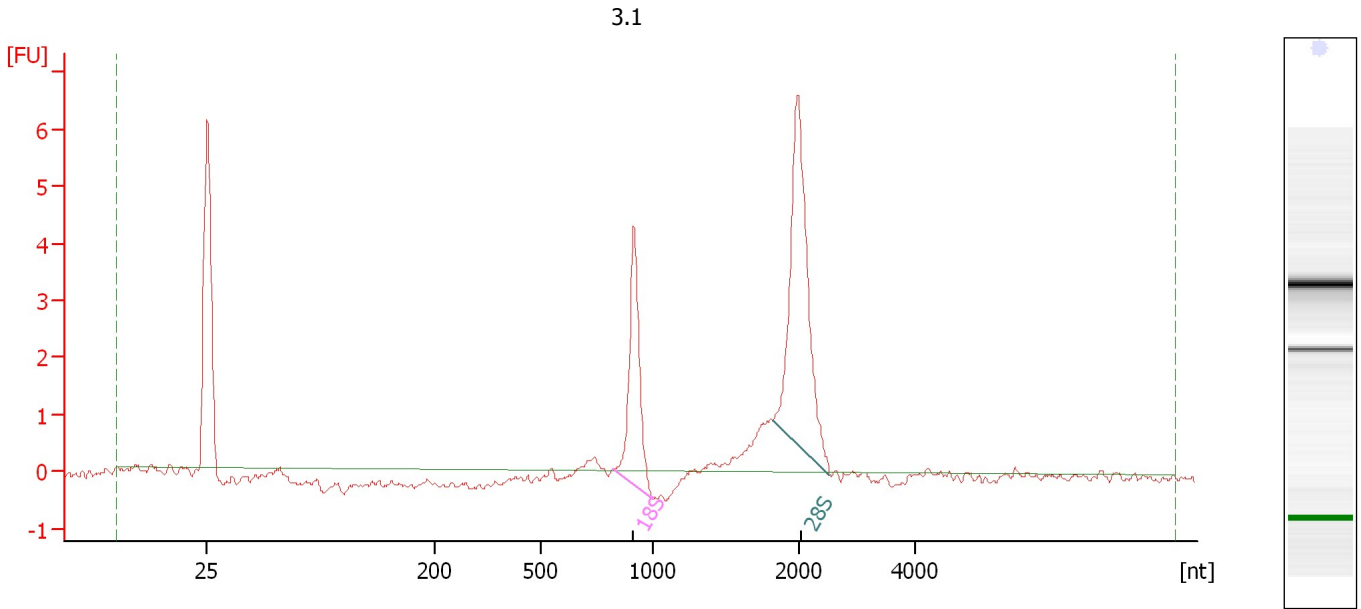
**Fragment table for sample 8 : 2.4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	819	984	9.7	29.1
28S	1,808	2,621	21.0	63.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 3.1**

RNA Area:	21.4	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	35 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:10

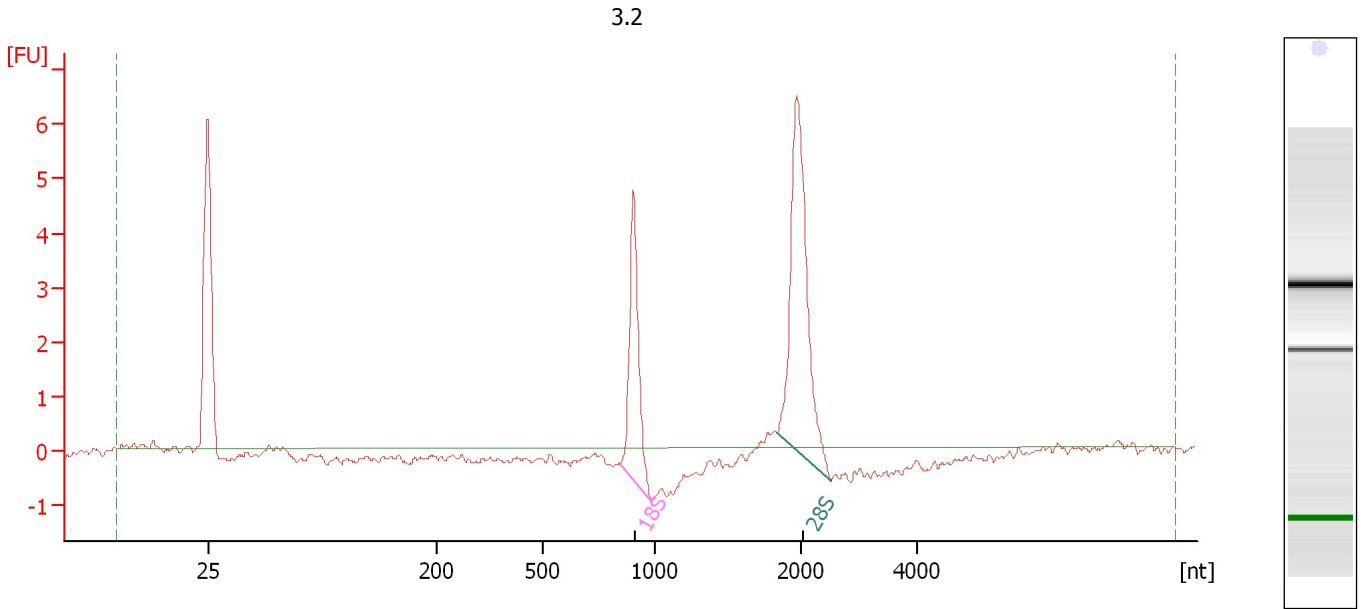
**Fragment table for sample 9 : 3.1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	823	993	5.7	26.5
28S	1,816	2,534	11.2	52.3

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 3.2**

RNA Area:	16.0	RNA Integrity Number (RIN):	10 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	26 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]:	1.9	Result Flagging Label:	RIN:10

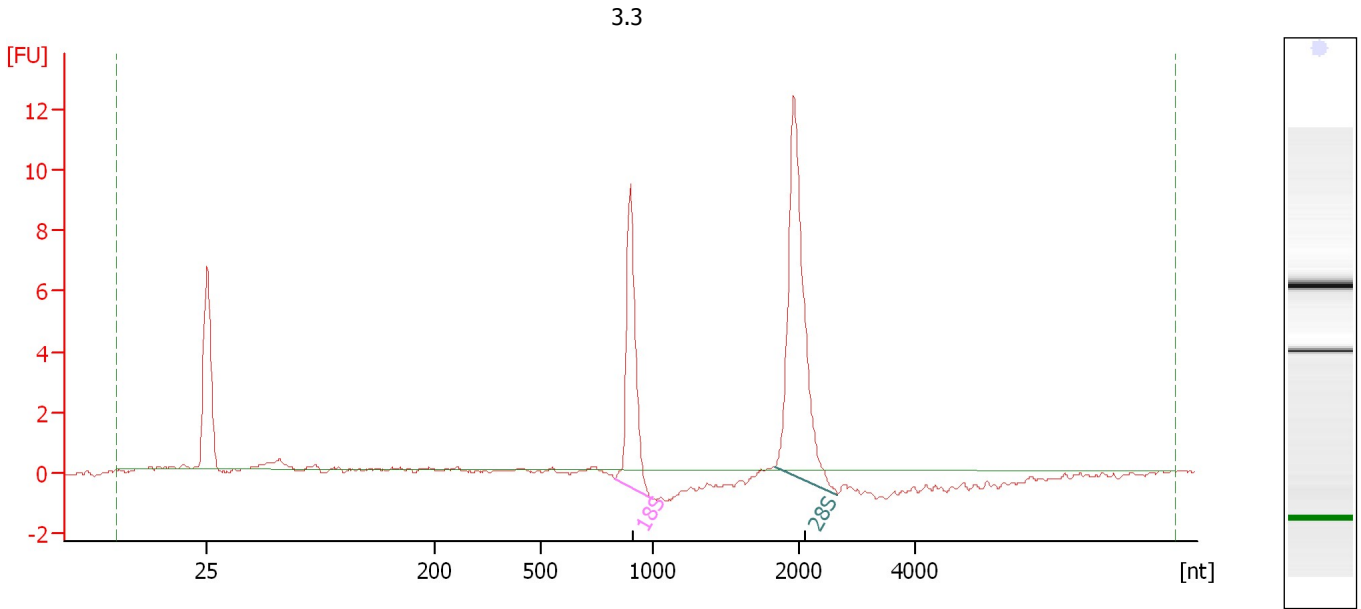
**Fragment table for sample 10 : 3.2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	843	979	6.0	37.3
28S	1,830	2,530	11.2	70.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 3.3**

RNA Area:	31.4	RNA Integrity Number (RIN):	8.9 (B.02.08)
RNA Concentration:	51 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]:	1.9	Result Flagging Label:	RIN: 8.90

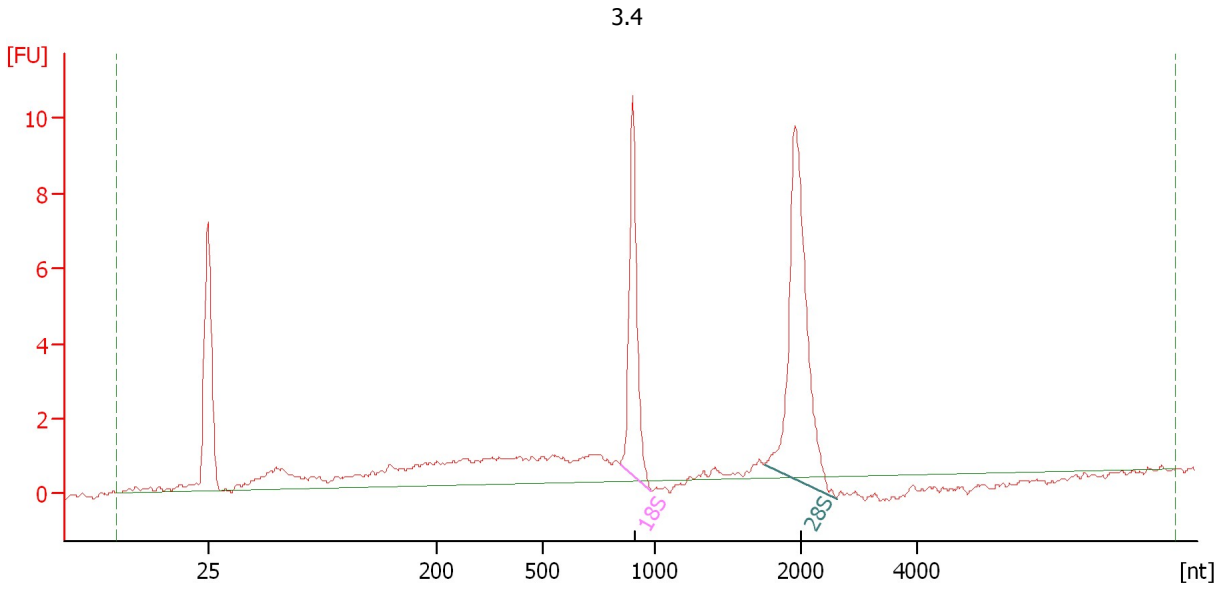
**Fragment table for sample 11 : 3.3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	828	993	10.8	34.5
28S	1,831	2,662	20.7	65.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 3.4**

RNA Area: 56.5                      RNA Integrity Number (RIN): 7.2 (B.02.08)  
RNA Concentration: 92 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.8              Result Flagging Label: RIN: 7.20

**Fragment table for sample 12 : 3.4**

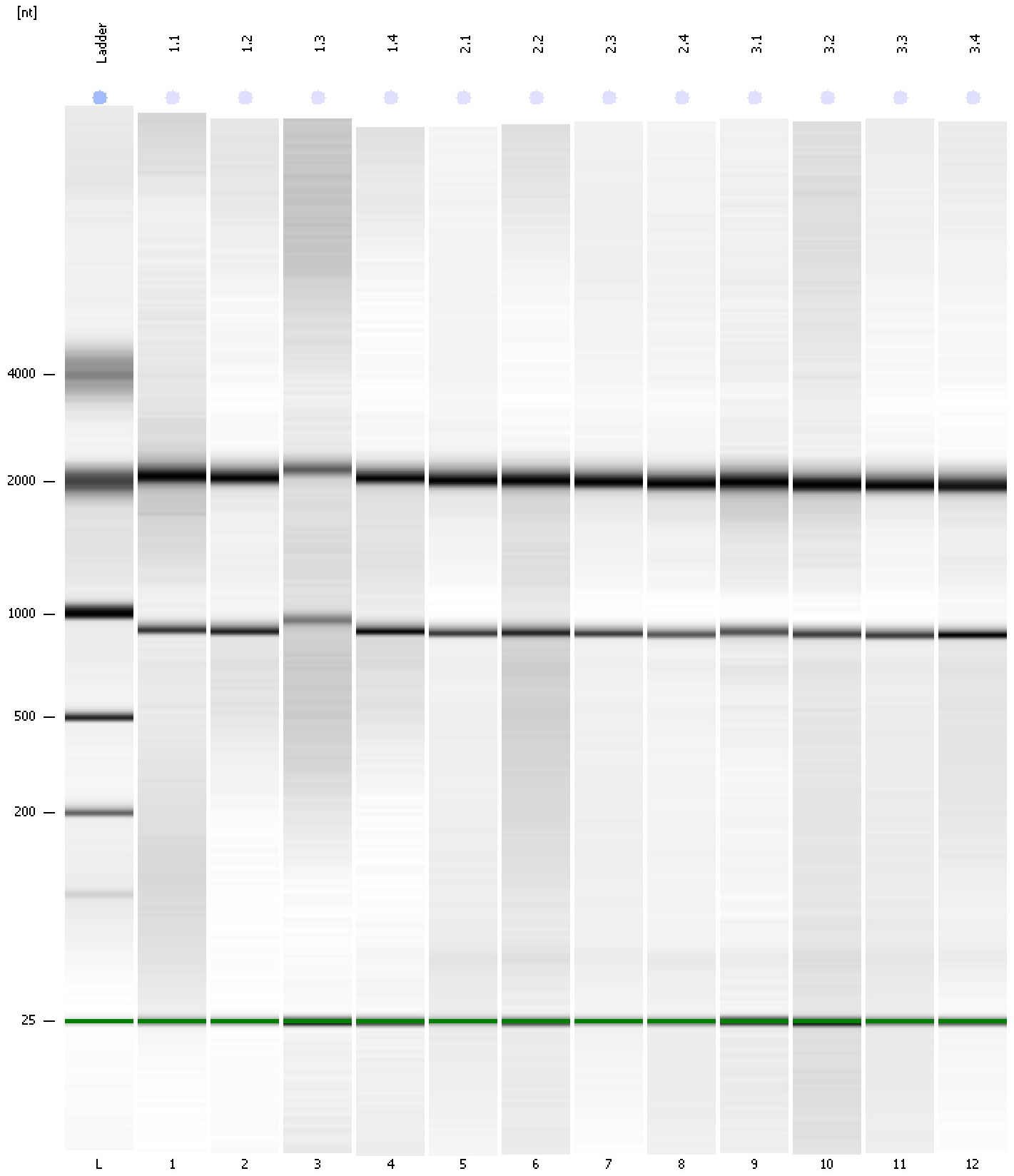
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	843	979	9.5	16.8
28S	1,749	2,603	17.5	30.9



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
Modified: 2/18/2017 11:51:18 AM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18\_001.xad

Created: 2/18/2017 10:59:16 AM  
 Modified: 2/18/2017 11:51:18 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		2/18/2017 11:23:05 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_001.xad)		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/18/2017 10:59:21 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1