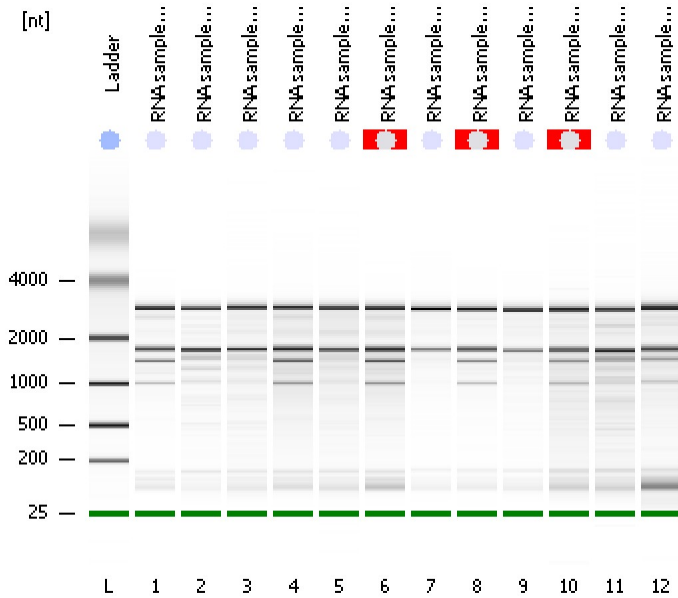


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

Electrophoresis File Run Summary



Instrument Information:

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

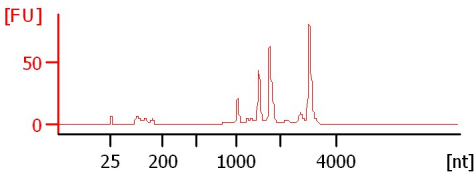
Assay Information:

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.

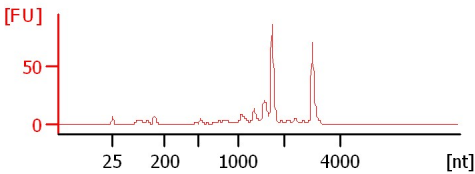
Chip Information:

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

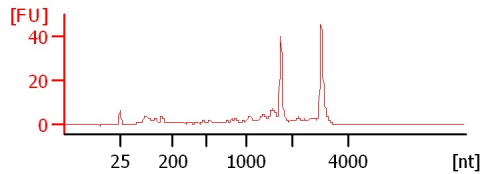
RNA sample no. 3  
RIN: 7.50



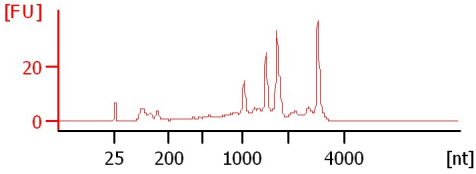
RNA sample No. 9  
RIN: 6.80



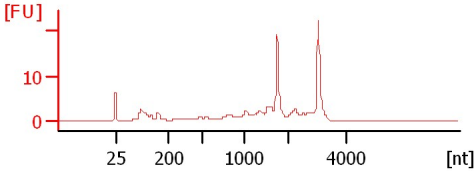
RNA sample no. 31  
RIN: 7.10



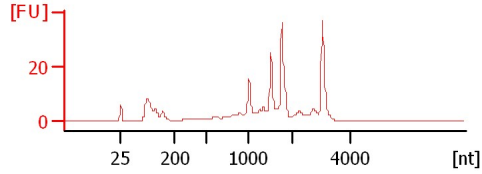
RNA sample No. 32  
RIN: 6.50



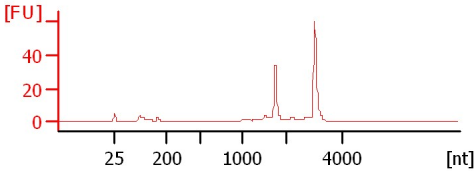
RNA sample No. 33  
RIN: 7



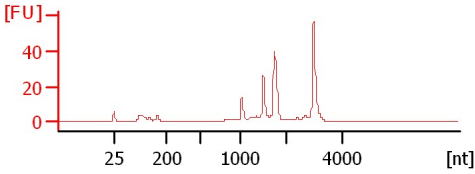
RNA sample no. 34  
RIN N/A



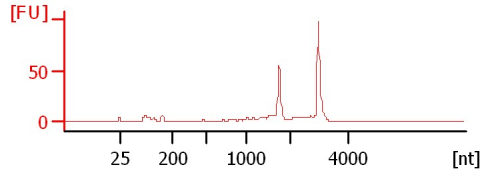
RNA sample no. 21  
RIN: 8.80



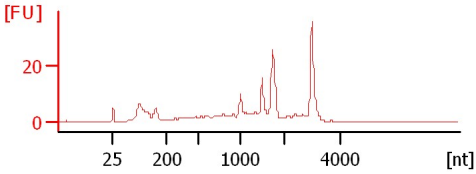
RNA sample no. 22  
RIN N/A



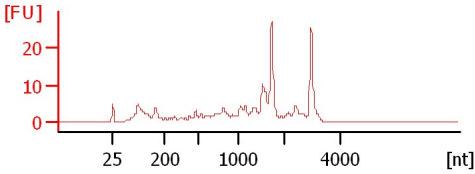
RNA sample no. 63  
RIN: 8.70



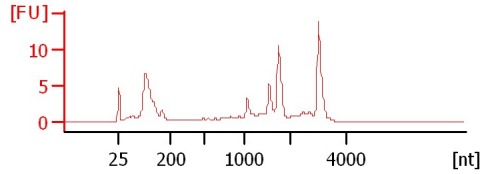
RNA sample No. 64  
RIN N/A



RNA sample no. 65  
RIN: 6.30



RNA sample No. 66  
RIN: 7.30



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
 Modified: 8/27/2013 1:32:13 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
RNA sample no. 3		✓	RIN: 7.50	
RNA sample No. 9		✓	RIN: 6.80	
RNA sample no. 31		✓	RIN: 7.10	
RNA sample No. 32		✓	RIN: 6.50	
RNA sample No. 33		✓	RIN:7	
RNA sample no. 34		✓	RIN N/A	
RNA sample no. 21		✓	RIN: 8.80	
RNA sample no. 22		✓	RIN N/A	
RNA sample no. 63		✓	RIN: 8.70	
RNA sample No. 64		✓	RIN N/A	
RNA sample no. 65		✓	RIN: 6.30	
RNA sample No. 66		✓	RIN: 7.30	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 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

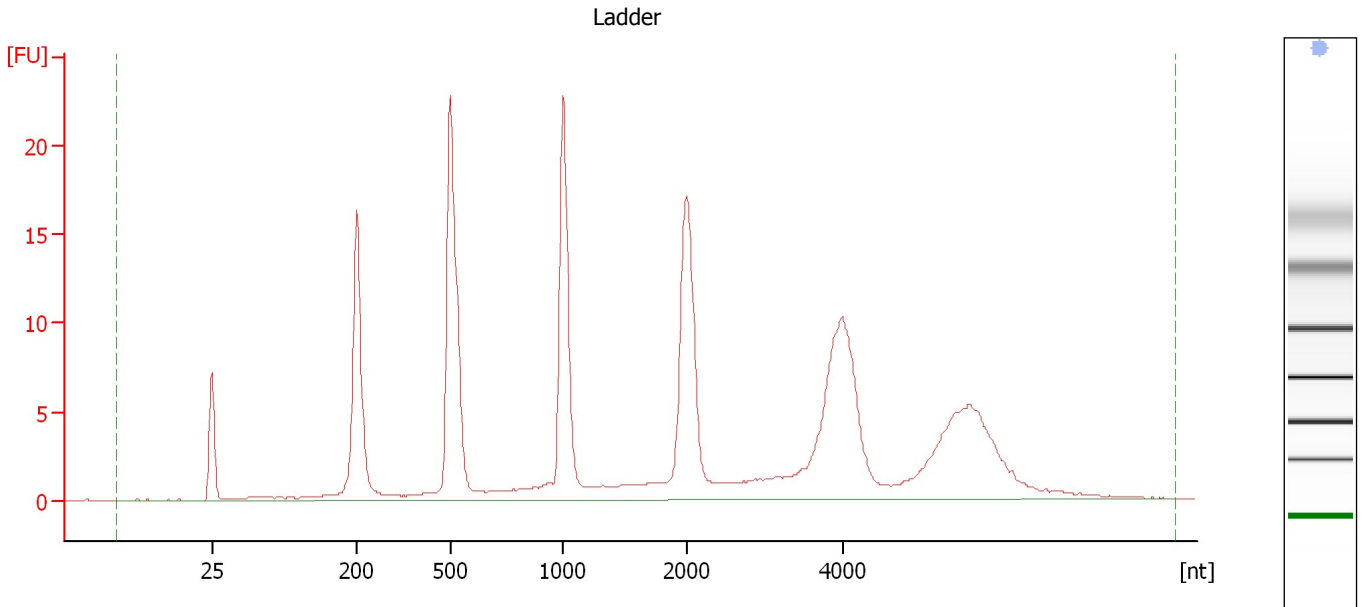
### Ladder

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\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary**



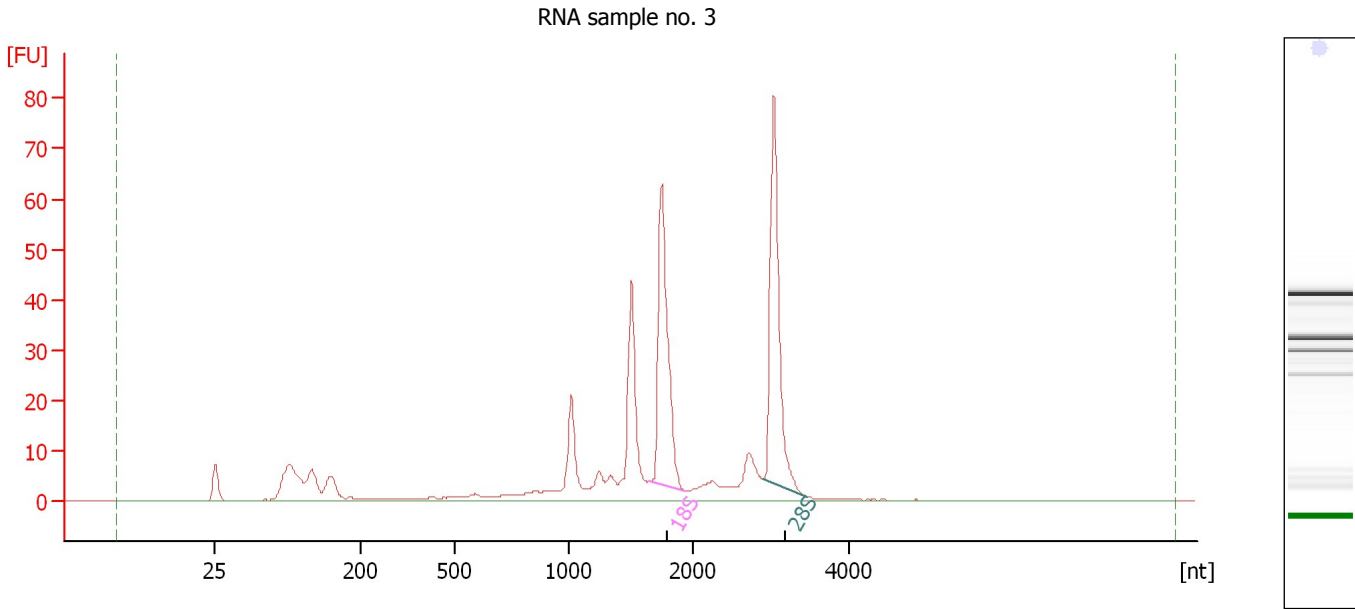
**Overall Results for Ladder**

RNA Area:	214.3	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\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : RNA sample no. 3**

RNA Area: 345.4                      RNA Integrity Number (RIN): 7.5 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 242 ng/μl  
rRNA Ratio [28s / 18s]: 1.1  
Result Flagging Color:   
Result Flagging Label: RIN: 7.50

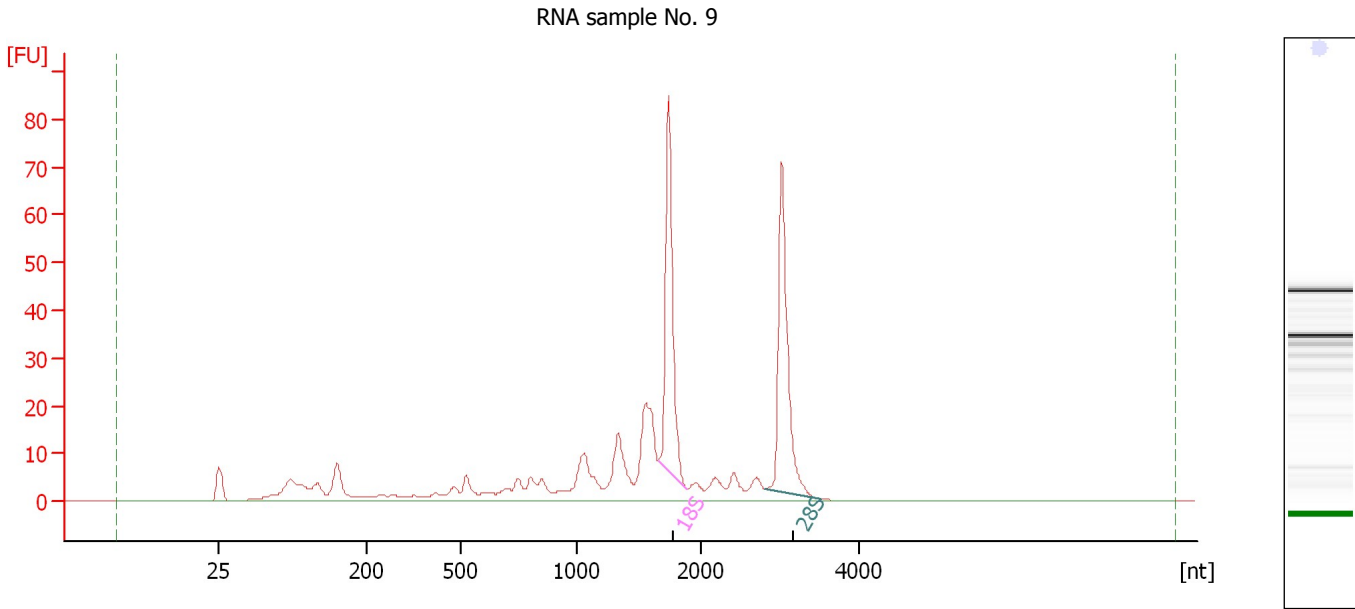
**Fragment table for sample 1 : RNA sample no. 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,638	1,941	65.8	19.0
28S	2,901	3,446	70.9	20.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : RNA sample No. 9**

RNA Area: 361.4                      RNA Integrity Number (RIN): 6.8 (B.02.08)  
RNA Concentration: 253 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.0              Result Flagging Label: RIN: 6.80

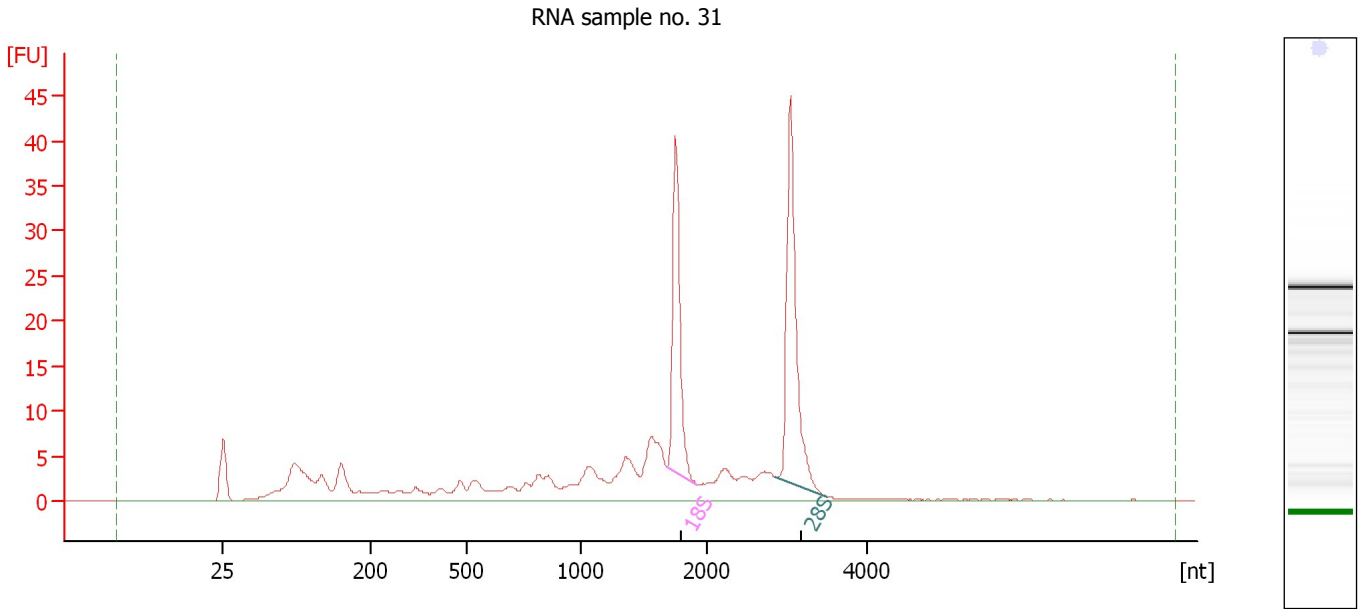
**Fragment table for sample 2 : RNA sample No. 9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,661	1,884	67.9	18.8
28S	2,816	3,505	66.5	18.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : RNA sample no. 31**

RNA Area: 221.2 RNA Integrity Number (RIN): 7.1 (B.02.08)  
RNA Concentration: 155 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN: 7.10

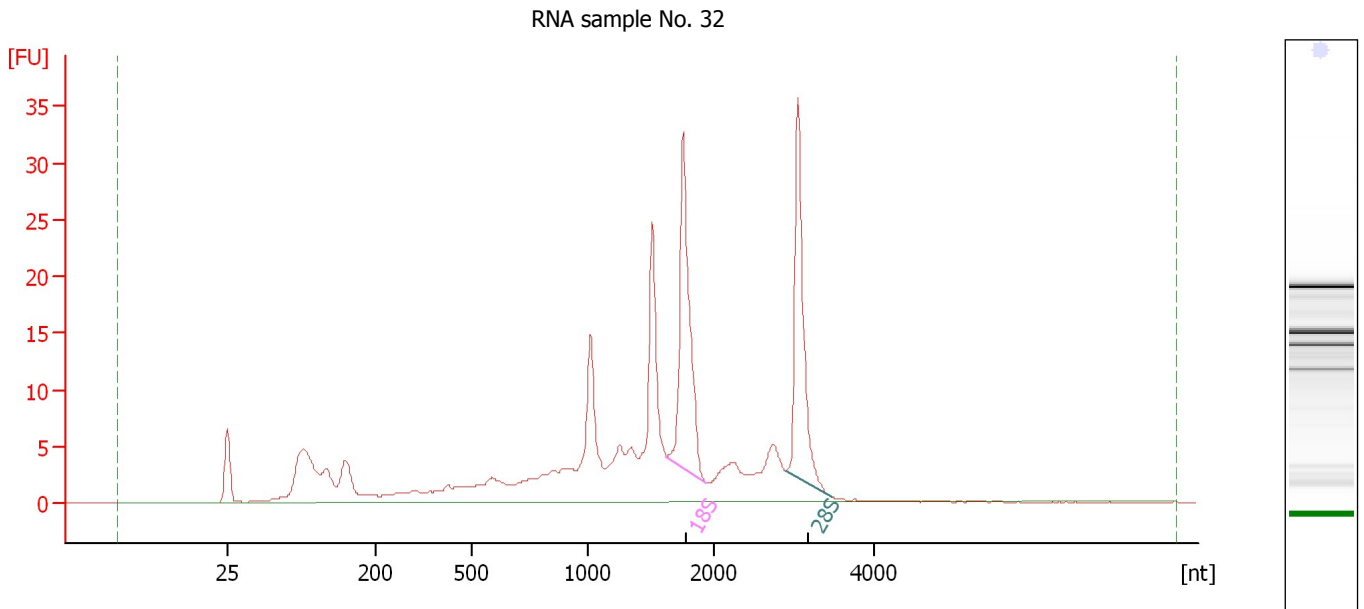
**Fragment table for sample 3 : RNA sample no. 31**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,674	1,921	30.2	13.7
28S	2,855	3,499	41.1	18.6

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
 Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : RNA sample No. 32**

RNA Area:	244.5	RNA Integrity Number (RIN):	6.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	171 ng/μl		
rRNA Ratio [28s / 18s]:	0.9	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
		Result Flagging Label:	RIN: 6.50

**Fragment table for sample 4 : RNA sample No. 32**

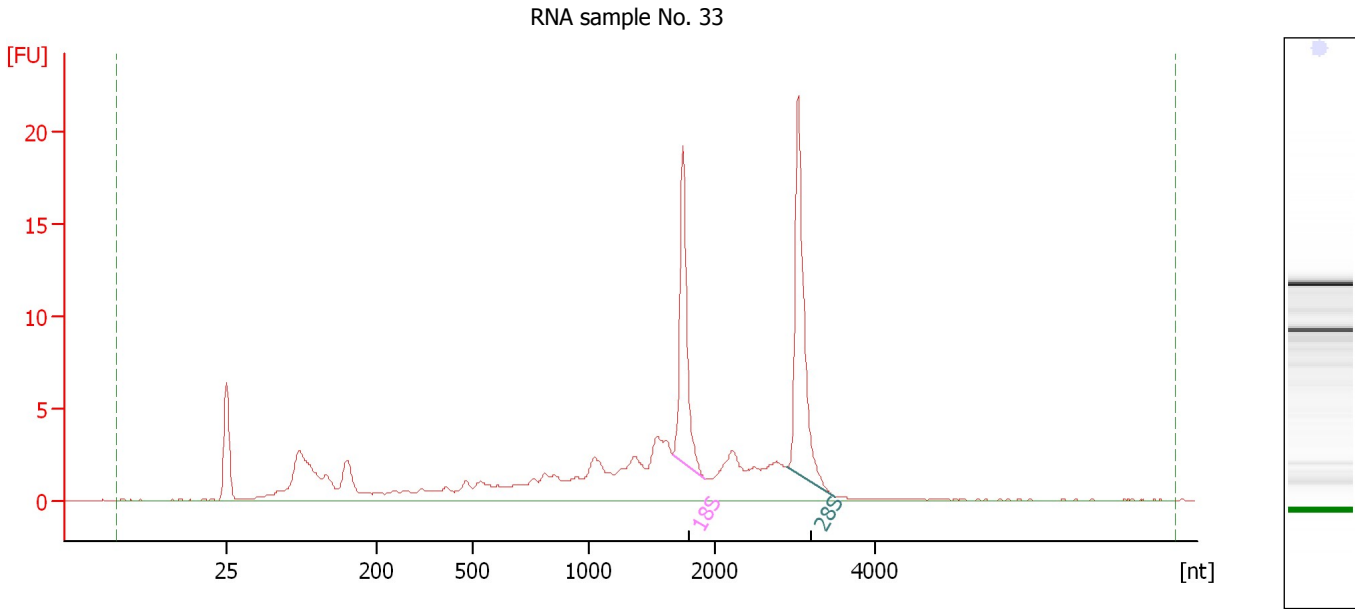
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,618	1,940	33.5	13.7
28S	2,892	3,466	29.9	12.2



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : RNA sample No. 33**

RNA Area: 120.1 RNA Integrity Number (RIN): 7 (B.02.08)  
RNA Concentration: 84 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.3 Result Flagging Label: RIN:7

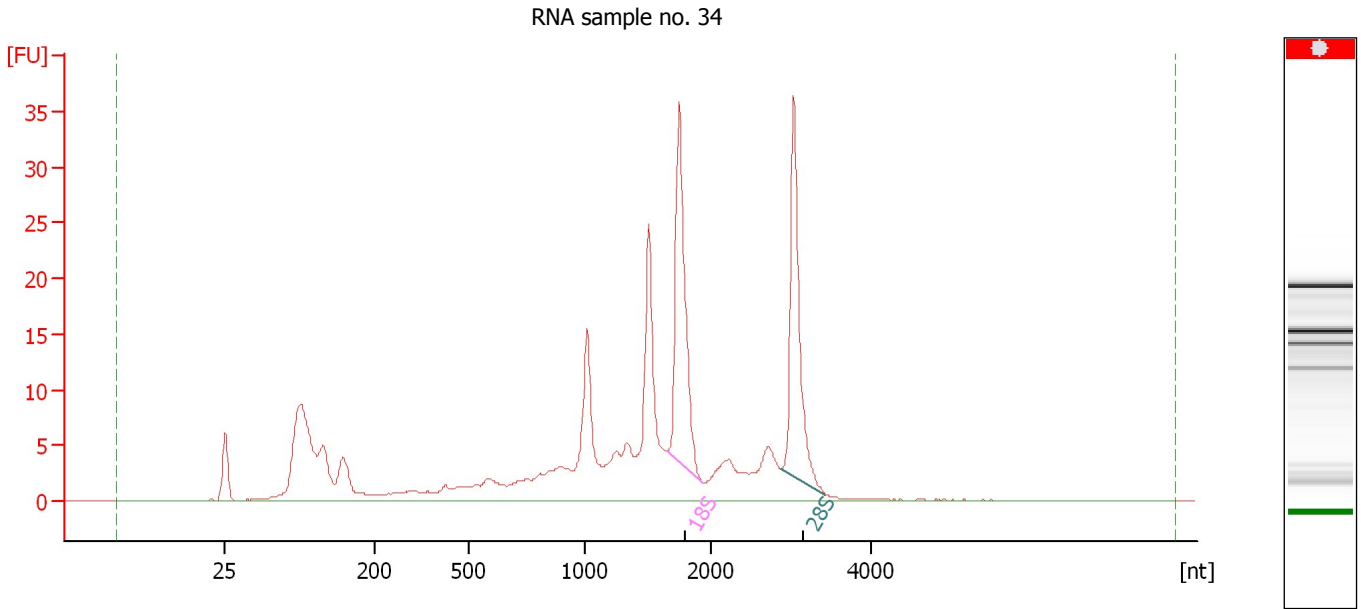
**Fragment table for sample 5 : RNA sample No. 33**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,662	1,915	14.8	12.3
28S	2,892	3,490	18.8	15.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : RNA sample no. 34**

RNA Area: 263.0 RNA Integrity Number (RIN): N/A (B.02.08)  
RNA Concentration: 184 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.9 Result Flagging Label: RIN N/A

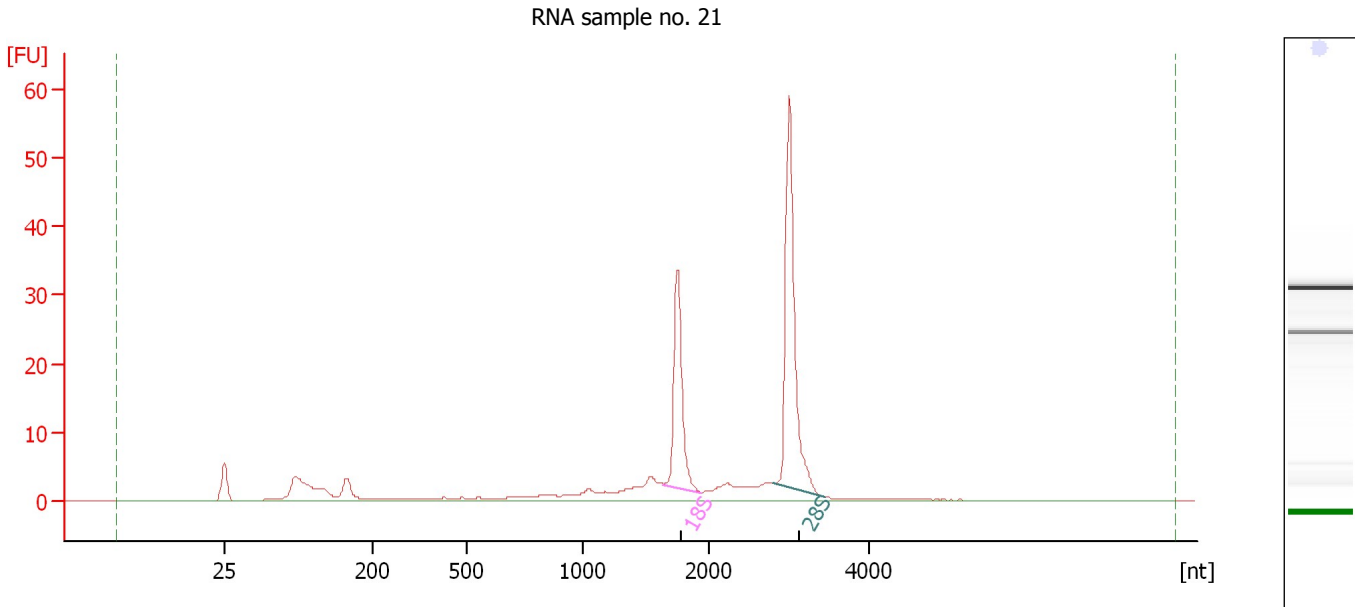
**Fragment table for sample 6 : RNA sample no. 34**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,642	1,931	35.2	13.4
28S	2,880	3,428	32.5	12.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : RNA sample no. 21**

RNA Area: 166.0 RNA Integrity Number (RIN): 8.8 (B.02.08)  
RNA Concentration: 116 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.8 Result Flagging Label: RIN: 8.80

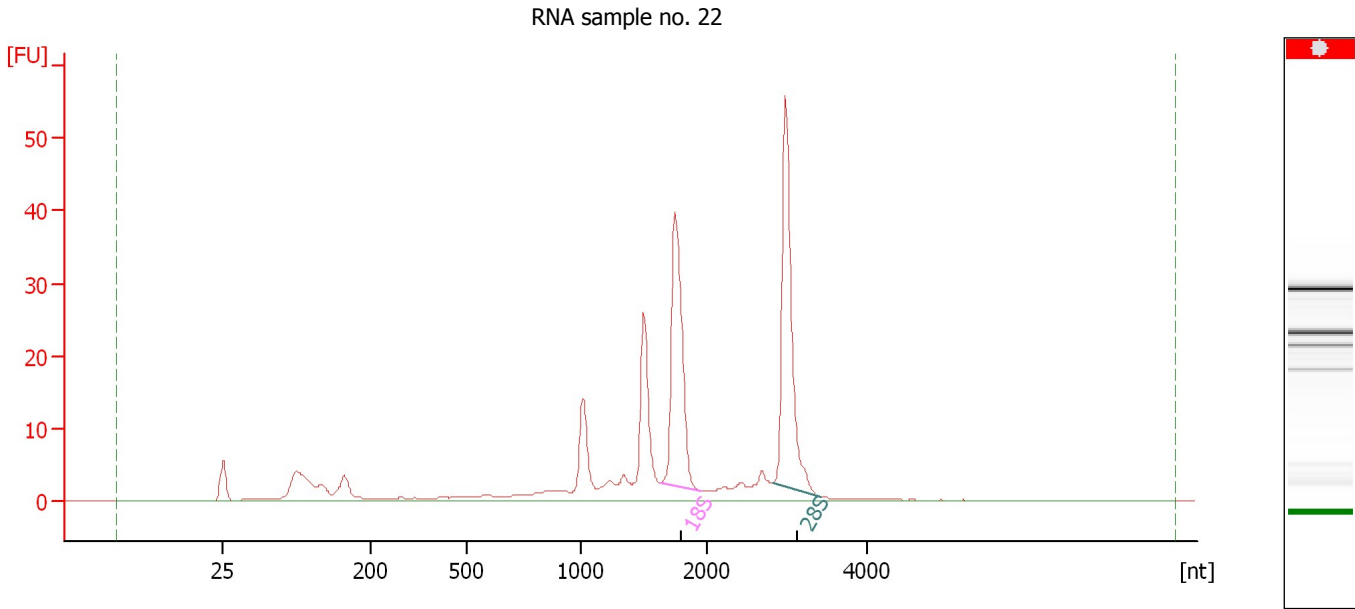
**Fragment table for sample 7 : RNA sample no. 21**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,632	1,930	29.2	17.6
28S	2,800	3,443	52.6	31.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : RNA sample no. 22**

RNA Area:	230.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	162 ng/μl	Result Flagging Color:	<span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	1.1	Result Flagging Label:	RIN N/A

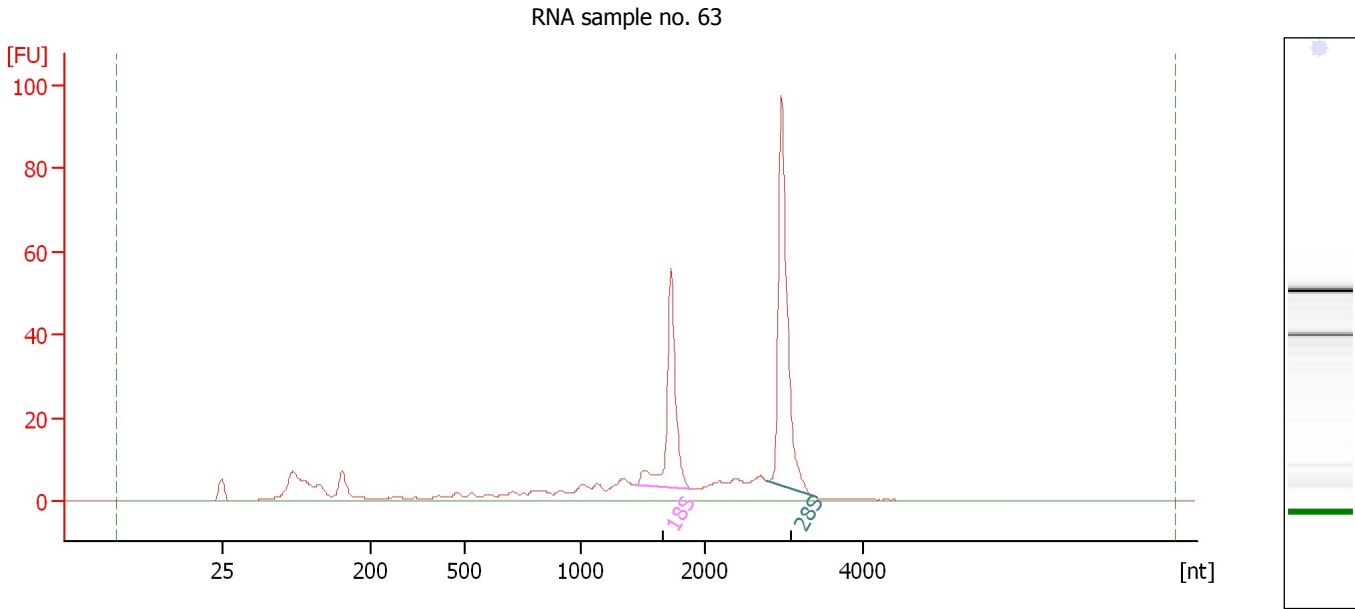
**Fragment table for sample 8 : RNA sample no. 22**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,631	1,946	46.5	20.1
28S	2,828	3,418	51.9	22.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : RNA sample no. 63**

RNA Area: 326.2 RNA Integrity Number (RIN): 8.7 (B.02.08)  
RNA Concentration: 228 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 8.70

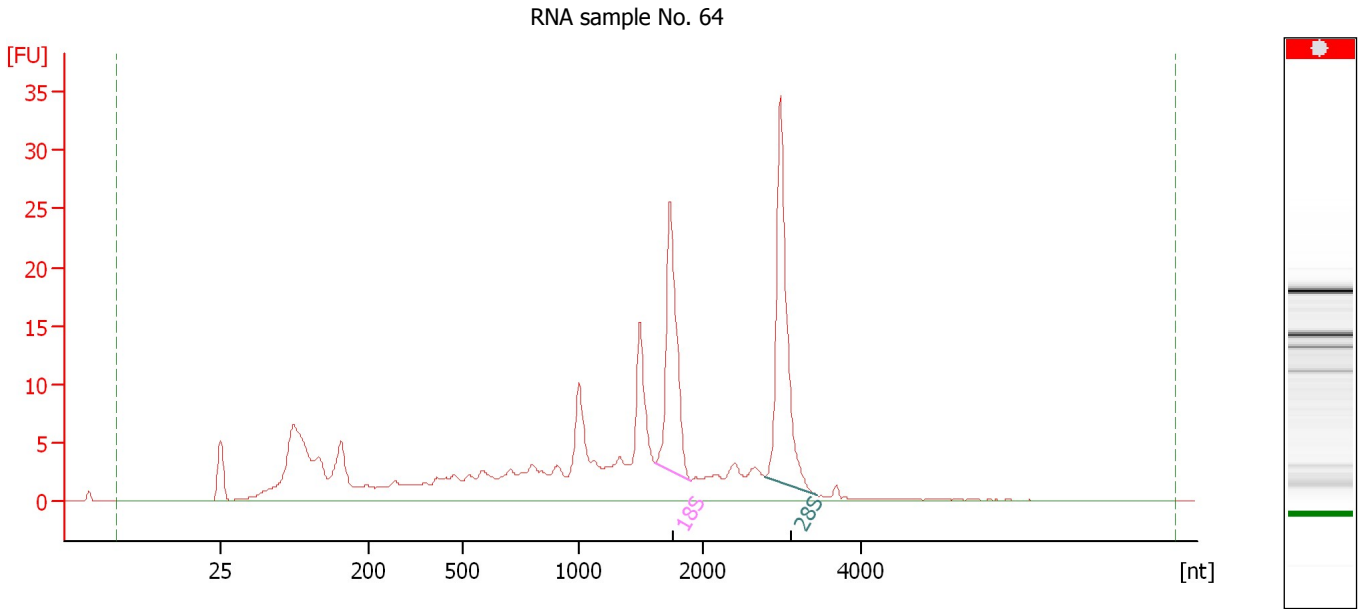
**Fragment table for sample 9 : RNA sample no. 63**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,442	1,903	56.2	17.2
28S	2,788	3,407	89.0	27.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : RNA sample No. 64**

RNA Area: 252.8                      RNA Integrity Number (RIN): N/A (B.02.08)  
RNA Concentration: 177 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.3              Result Flagging Label: RIN N/A

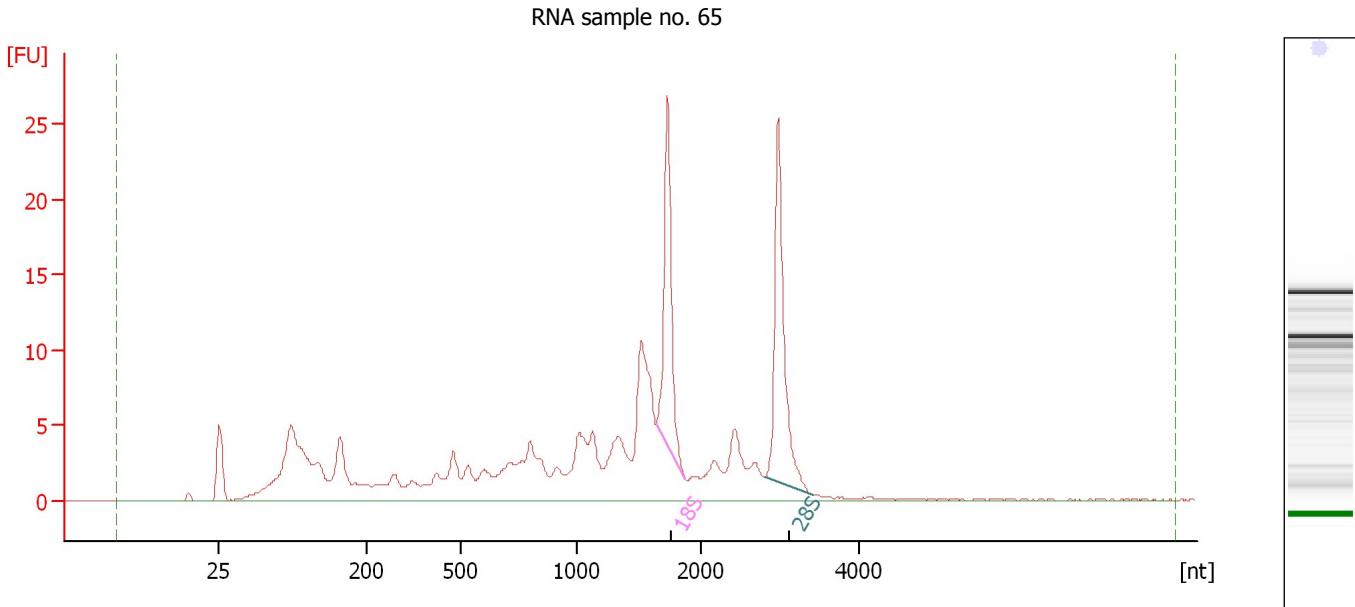
**Fragment table for sample 10 : RNA sample No. 64**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,620	1,902	28.1	11.1
28S	2,789	3,449	36.2	14.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : RNA sample no. 65**

RNA Area: 208.0 RNA Integrity Number (RIN): 6.3 (B.02.08)  
RNA Concentration: 146 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.2 Result Flagging Label: RIN: 6.30

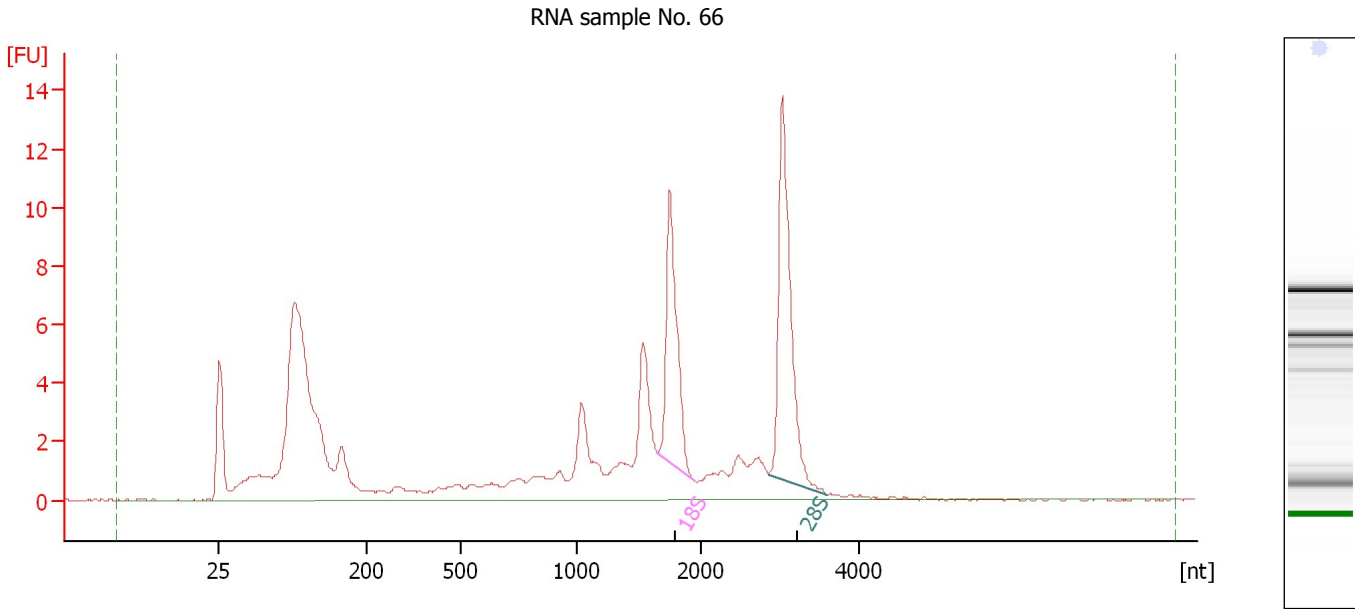
**Fragment table for sample 11 : RNA sample no. 65**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,644	1,875	20.5	9.9
28S	2,803	3,424	24.4	11.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : RNA sample No. 66**

RNA Area: 117.0 RNA Integrity Number (RIN): 7.3 (B.02.08)  
RNA Concentration: 82 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN: 7.30

**Fragment table for sample 12 : RNA sample No. 66**

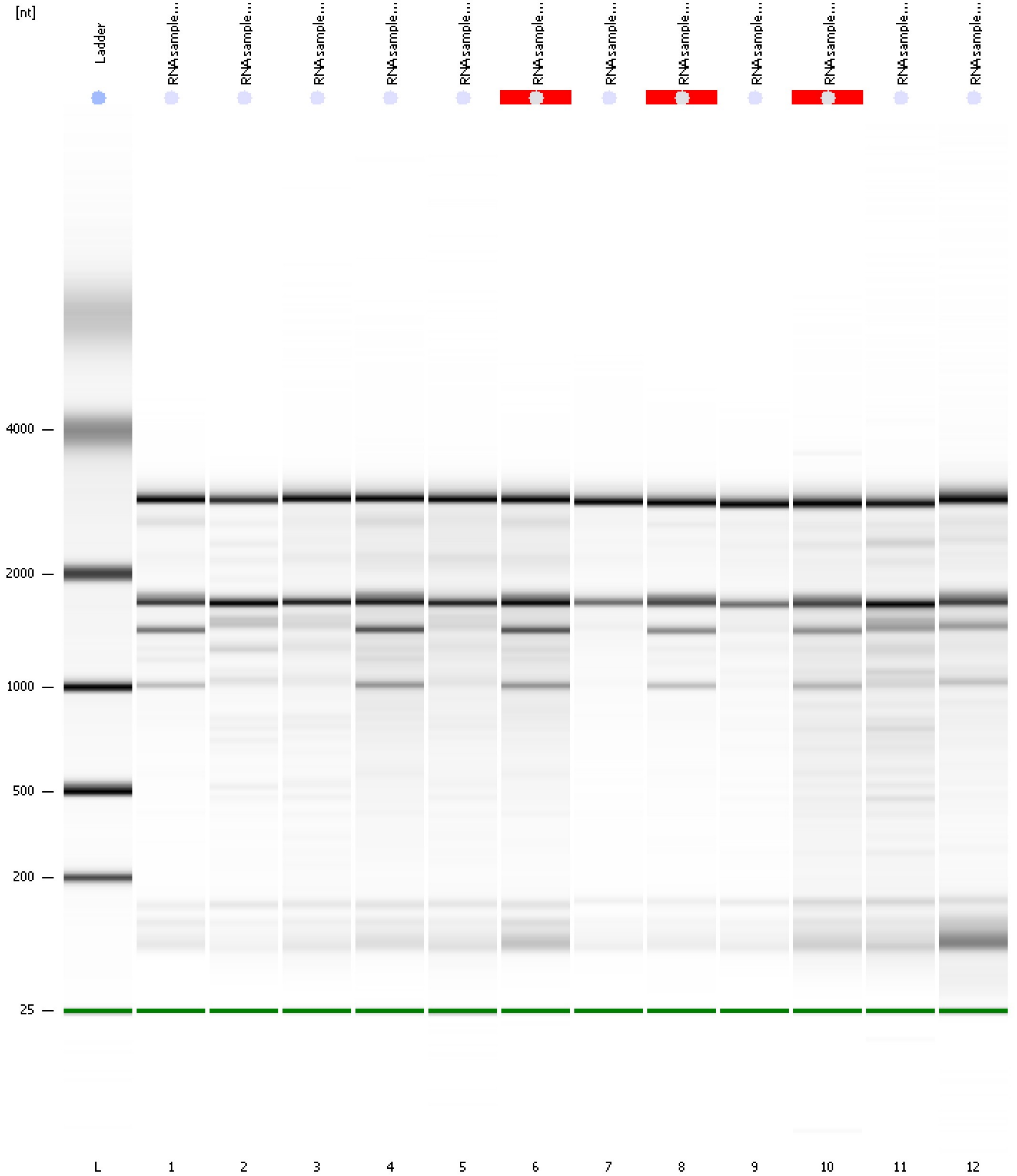
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,652	1,944	11.7	10.0
28S	2,857	3,586	16.4	14.0



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
Modified: 8/27/2013 1:32:13 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-27\2013-08-27\_004.xad

Created: 8/27/2013 1:08:18 PM  
 Modified: 8/27/2013 1:32:13 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		8/27/2013 1:32:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-27\2013-08-27_004.xad)		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/27/2013 1:08:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1