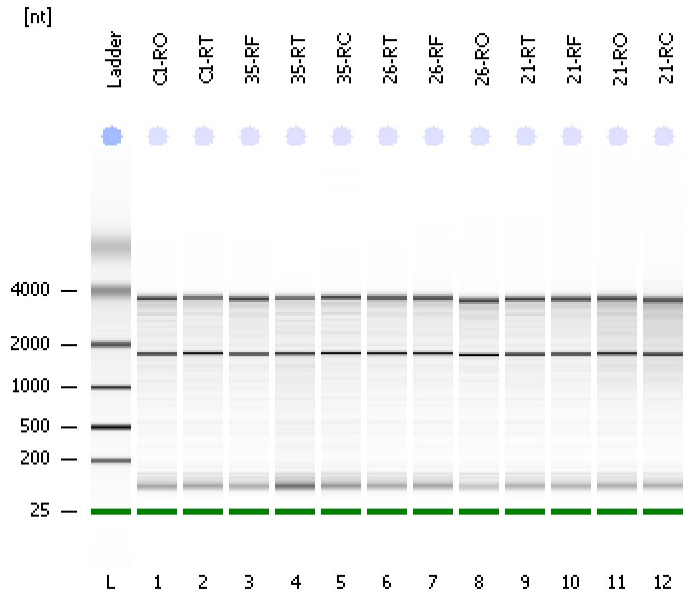


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

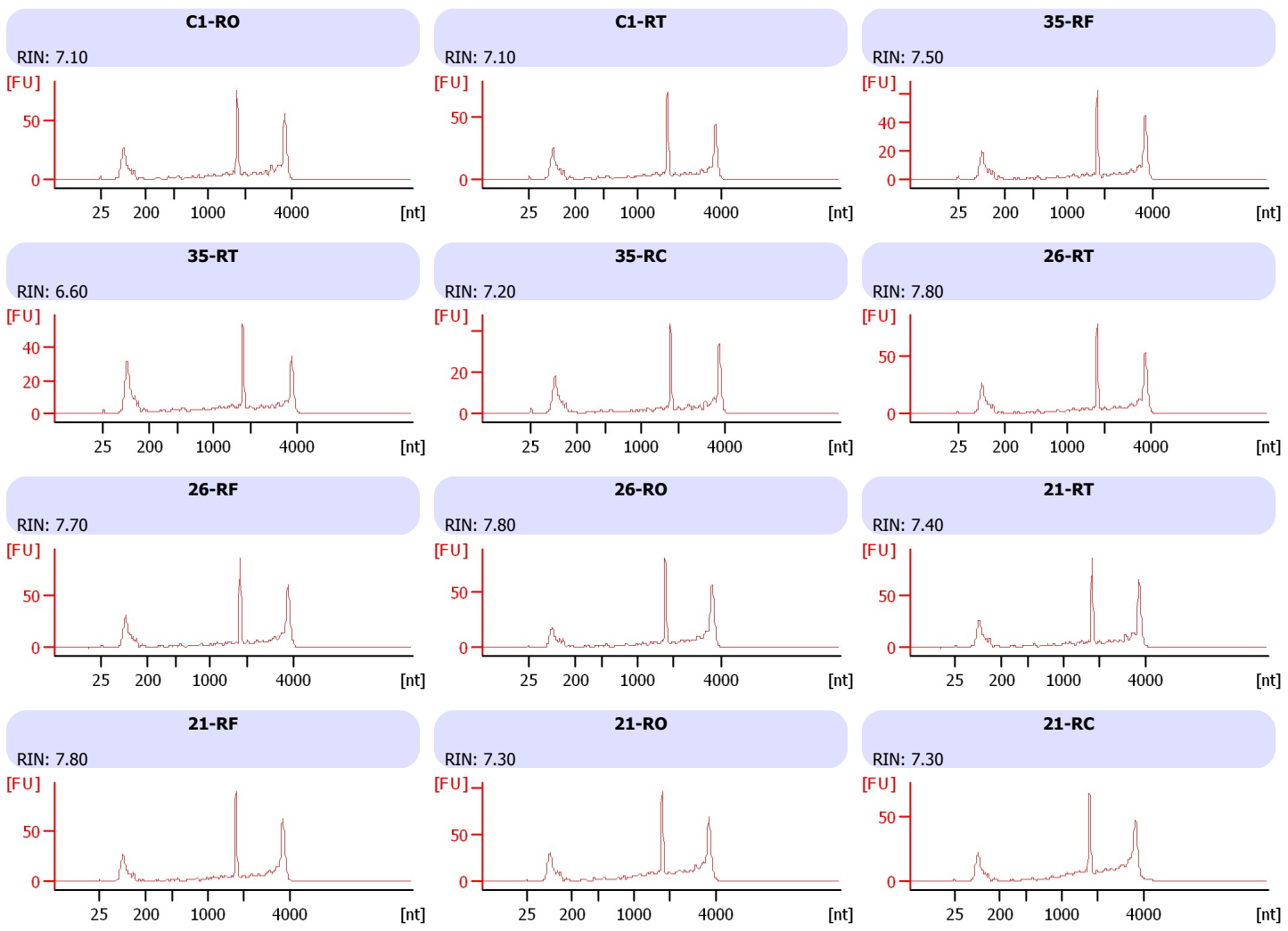
Electrophoresis File Run Summary



**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\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
 Modified: 8/20/2013 4:39:35 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
C1-RO		✓	RIN: 7.10	
C1-RT		✓	RIN: 7.10	
35-RF		✓	RIN: 7.50	
35-RT		✓	RIN: 6.60	
35-RC		✓	RIN: 7.20	
26-RT		✓	RIN: 7.80	
26-RF		✓	RIN: 7.70	
26-RO		✓	RIN: 7.80	
21-RT		✓	RIN: 7.40	
21-RF		✓	RIN: 7.80	
21-RO		✓	RIN: 7.30	
21-RC		✓	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\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 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

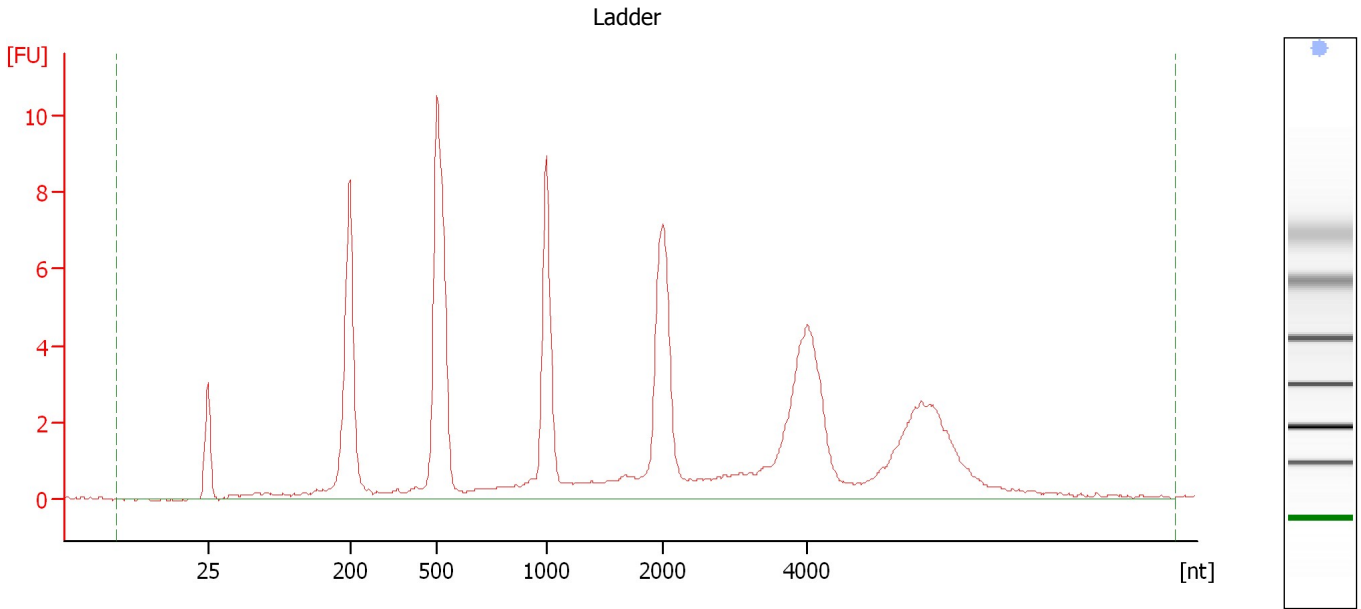
### Ladder

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\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary**



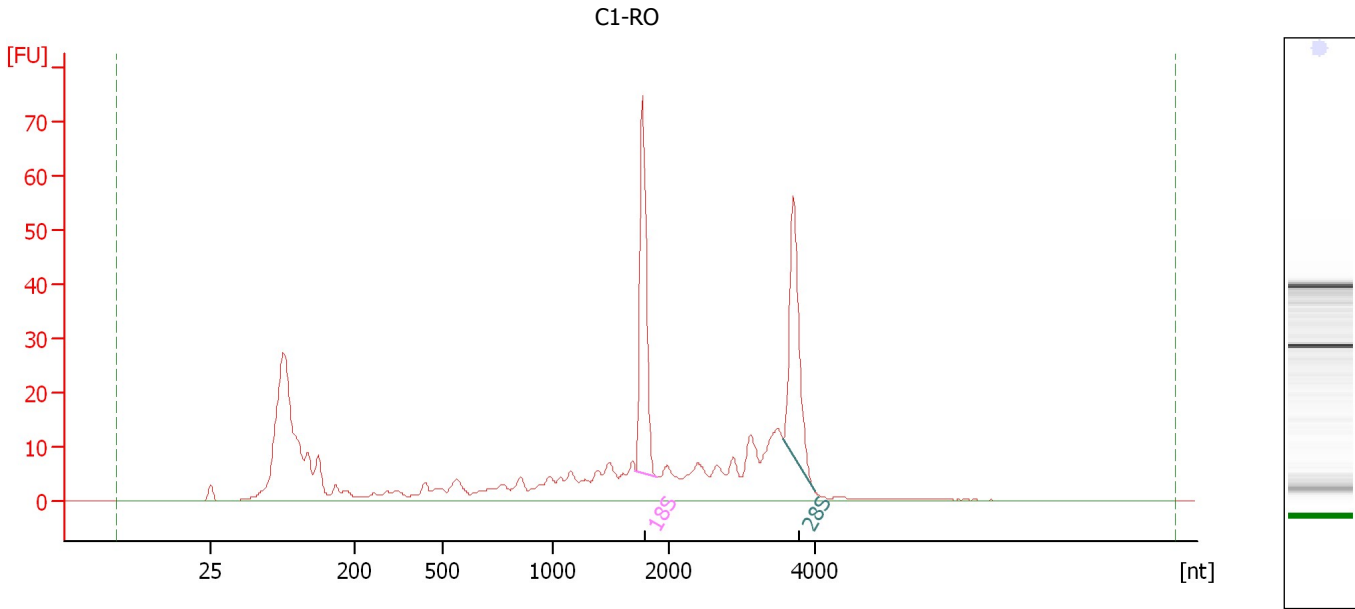
**Overall Results for Ladder**

RNA Area:	102.6	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/ $\mu$ l	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : C1-RO**

RNA Area:	452.3	RNA Integrity Number (RIN):	7.1 (B.02.08)
RNA Concentration:	661 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]:	0.9	Result Flagging Label:	RIN: 7.10

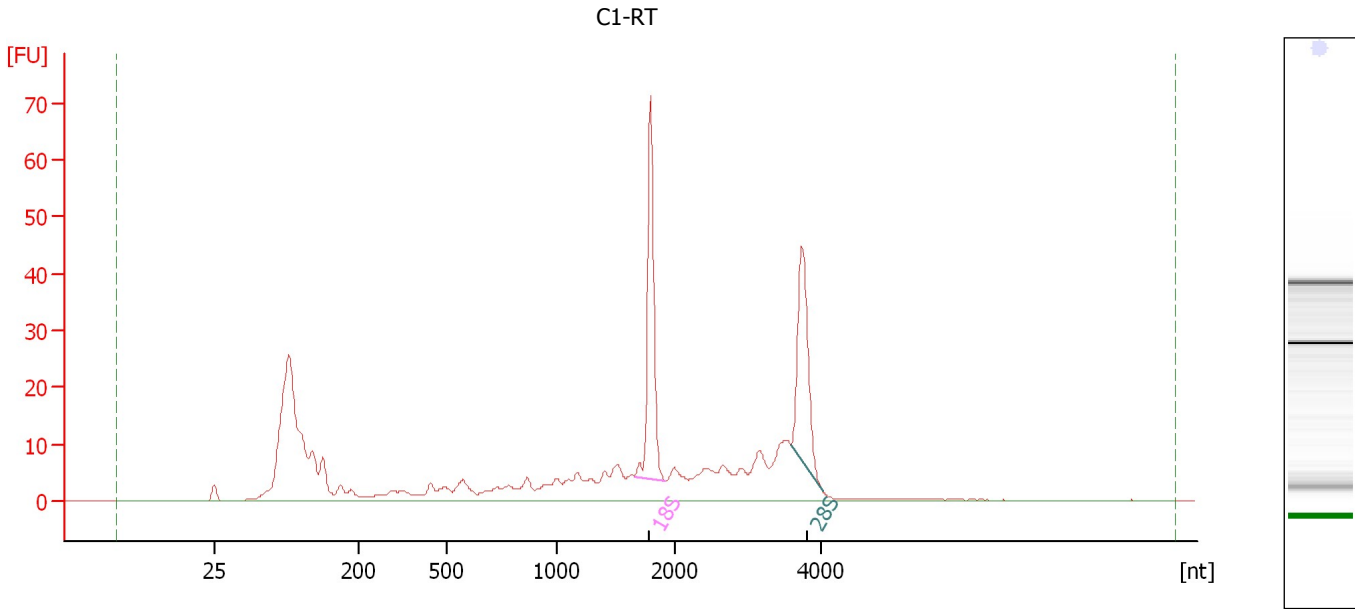
**Fragment table for sample 1 : C1-RO**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,715	1,901	53.3	11.8
28S	3,582	4,006	48.6	10.8

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : C1-RT**

RNA Area: 408.0                      RNA Integrity Number (RIN): 7.1 (B.02.08)  
RNA Concentration: 597 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.8                      Result Flagging Label: RIN: 7.10

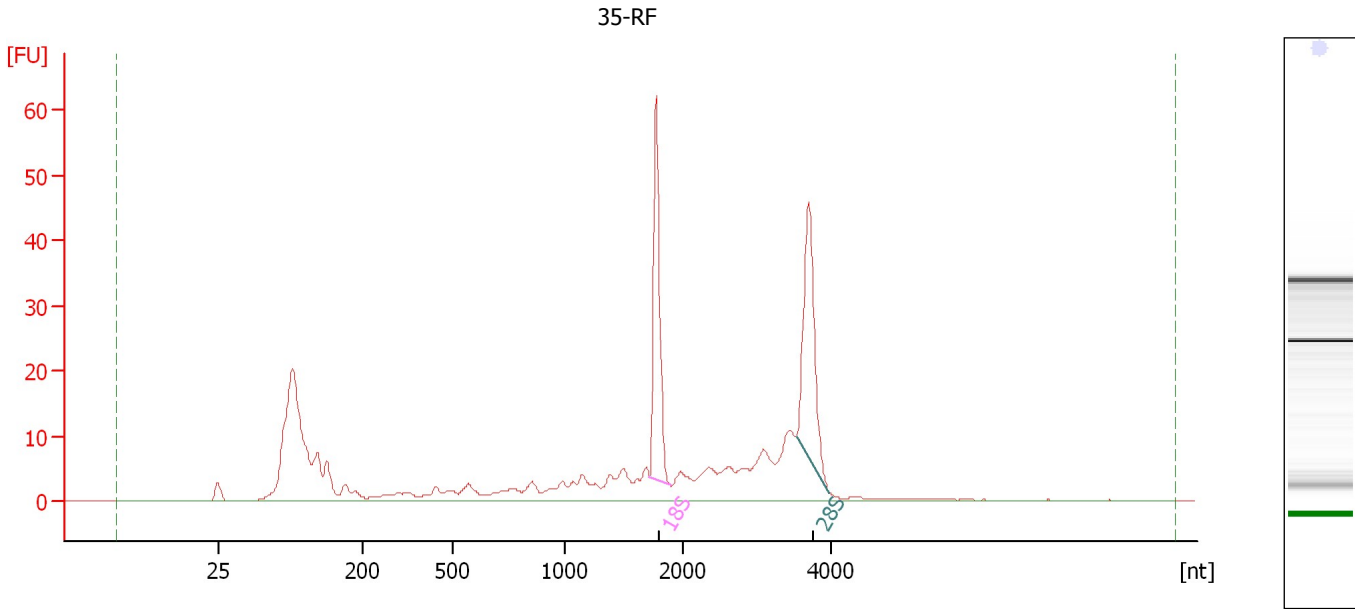
**Fragment table for sample 2 : C1-RT**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,658	1,923	53.2	13.0
28S	3,592	4,013	40.3	9.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 35-RF**

RNA Area: 337.0                      RNA Integrity Number (RIN): 7.5 (B.02.08)  
RNA Concentration: 493 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.0              Result Flagging Label: RIN: 7.50

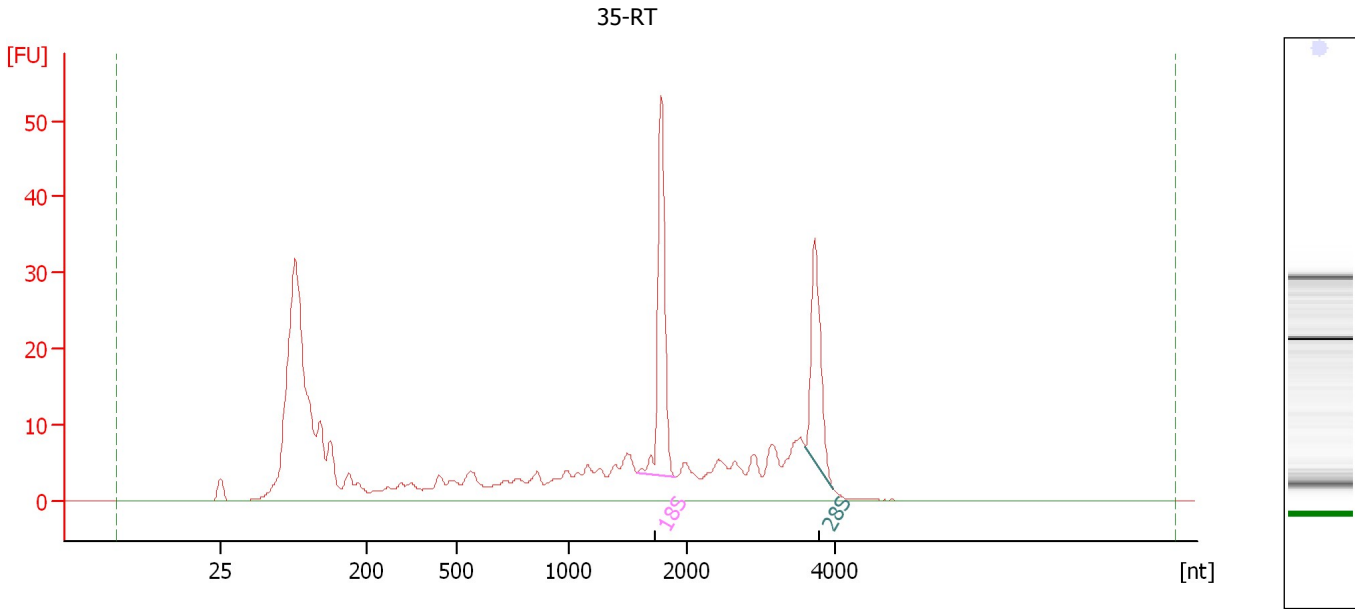
**Fragment table for sample 3 : 35-RF**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,719	1,900	43.1	12.8
28S	3,541	3,988	44.2	13.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 35-RT**

RNA Area: 396.4                      RNA Integrity Number (RIN): 6.6 (B.02.08)  
RNA Concentration: 580 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.7              Result Flagging Label: RIN: 6.60

**Fragment table for sample 4 : 35-RT**

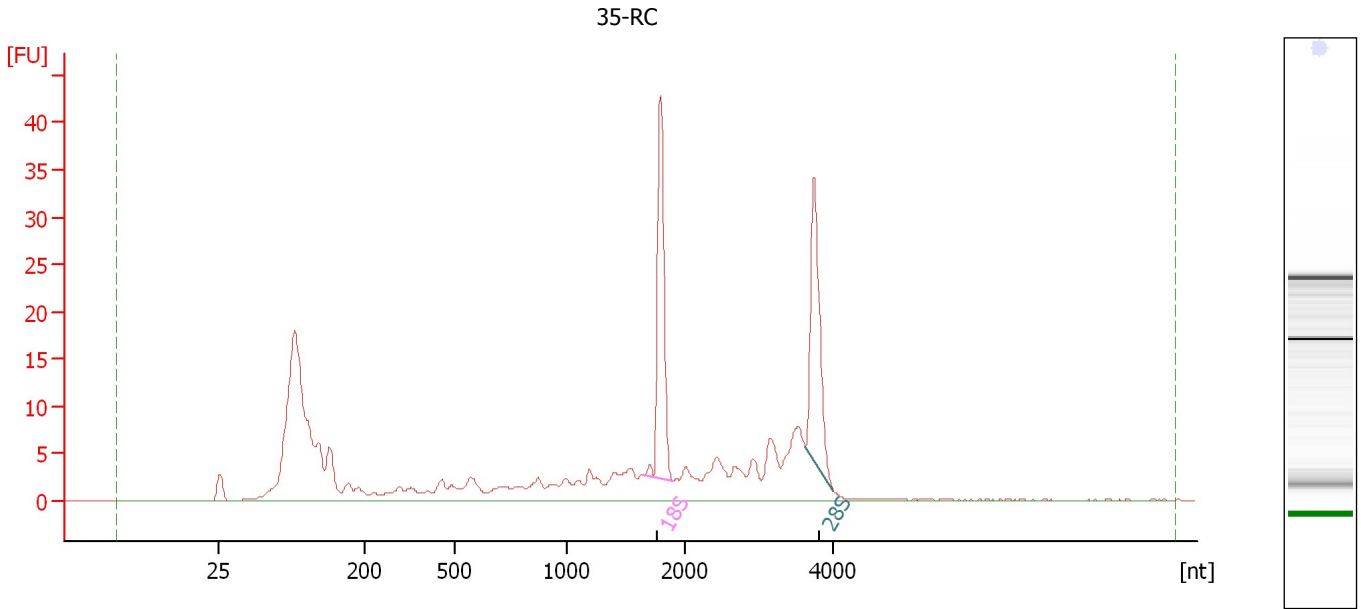
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,586	1,912	39.7	10.0
28S	3,595	3,983	28.3	7.1



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 35-RC**

RNA Area: 266.0                      RNA Integrity Number (RIN): 7.2 (B.02.08)  
RNA Concentration: 389 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.9                      Result Flagging Label: RIN: 7.20

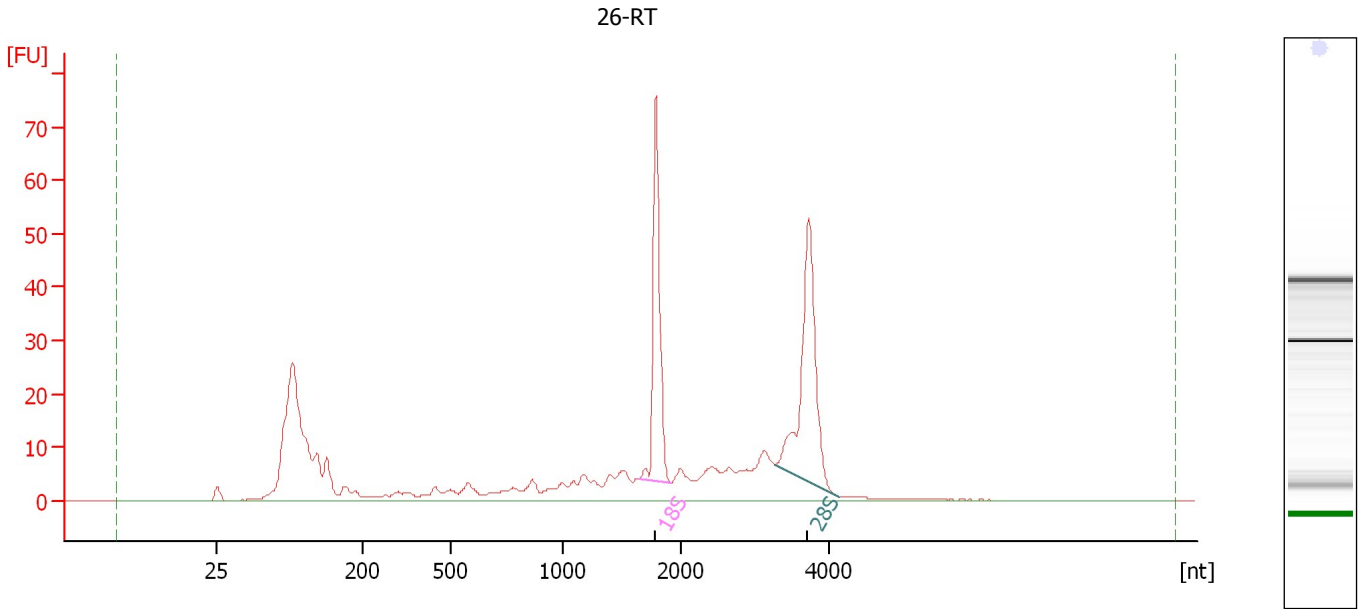
**Fragment table for sample 5 : 35-RC**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,657	1,901	30.2	11.4
28S	3,626	4,014	28.0	10.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 26-RT**

RNA Area: 426.5                      RNA Integrity Number (RIN): 7.8 (B.02.08)  
RNA Concentration: 624 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.3                      Result Flagging Label: RIN: 7.80

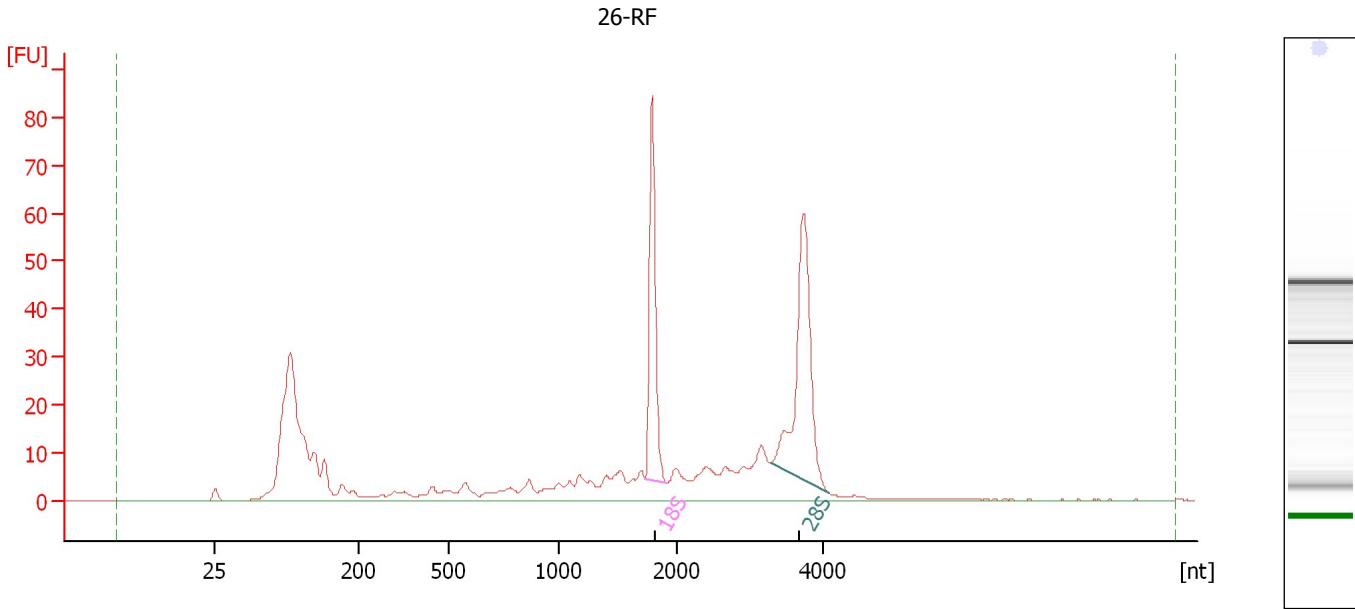
**Fragment table for sample 6 : 26-RT**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,654	1,917	57.3	13.4
28S	3,283	4,135	72.3	17.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
 Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 26-RF**

RNA Area:	478.3	RNA Integrity Number (RIN):	7.7 (B.02.08)
RNA Concentration:	699 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: 7.70

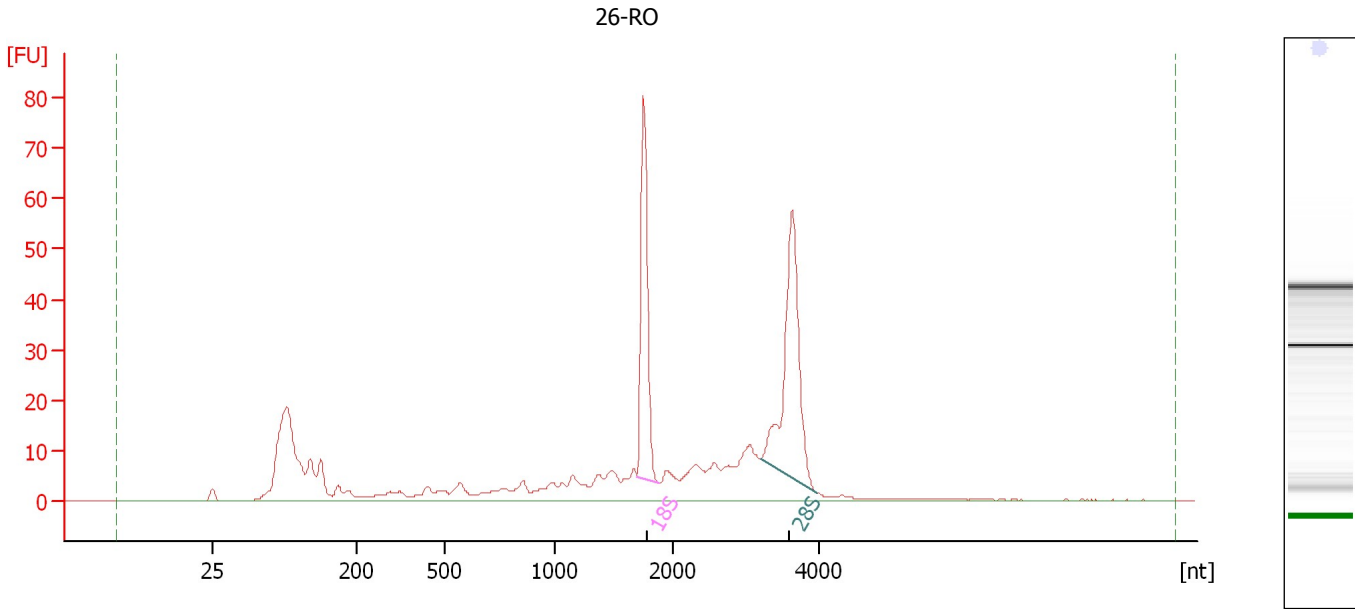
**Fragment table for sample 7 : 26-RF**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,732	1,924	61.1	12.8
28S	3,286	4,068	82.6	17.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 26-RO**

RNA Area: 431.2                      RNA Integrity Number (RIN): 7.8 (B.02.08)  
RNA Concentration: 630 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4              Result Flagging Label: RIN: 7.80

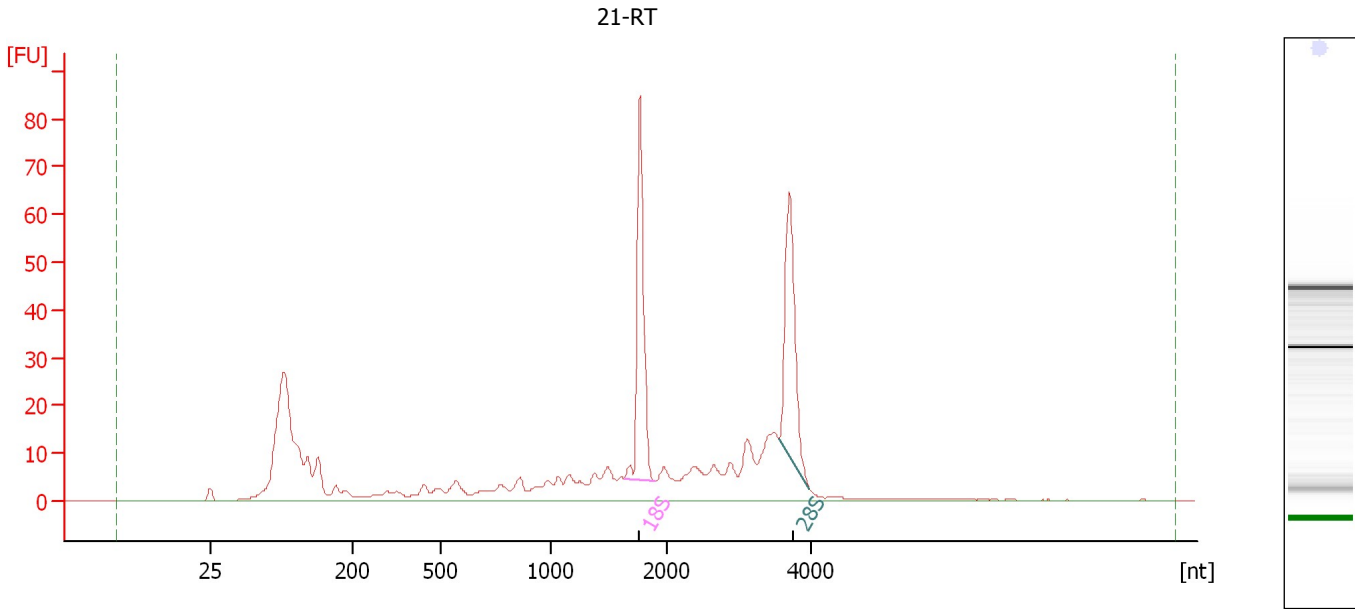
**Fragment table for sample 8 : 26-RO**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,702	1,885	57.7	13.4
28S	3,200	3,986	81.4	18.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 21-RT**

RNA Area:	476.9	RNA Integrity Number (RIN):	7.4 (B.02.08)
RNA Concentration:	697 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]:	0.9	Result Flagging Label:	RIN: 7.40

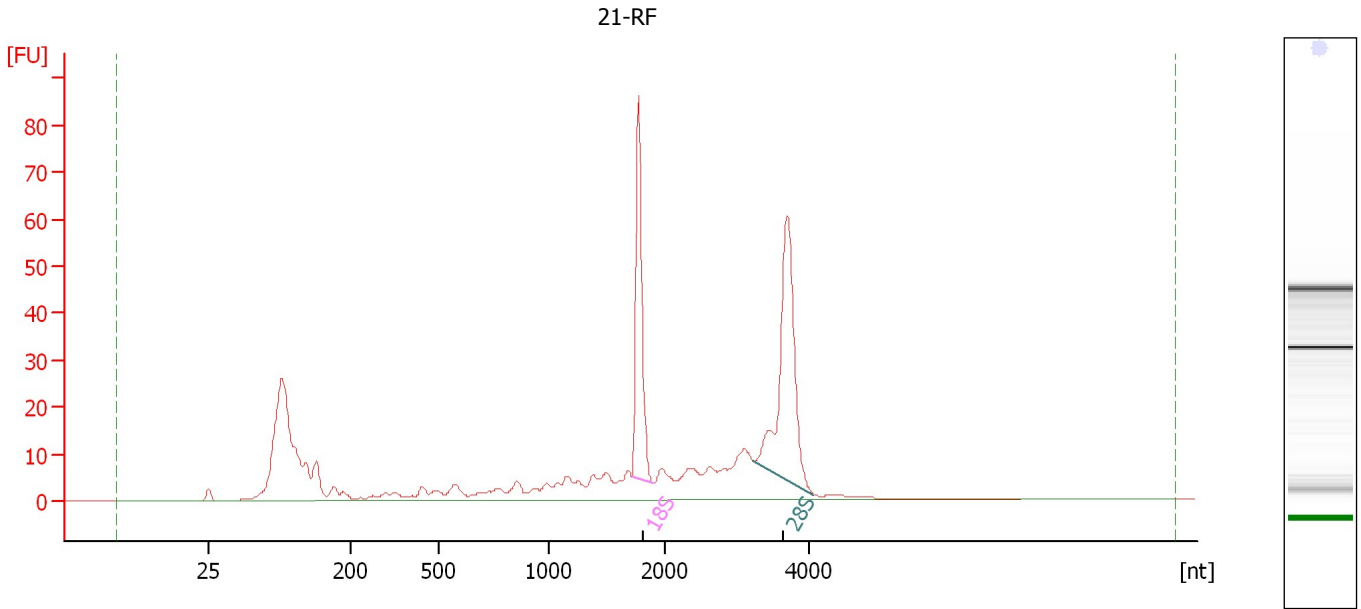
**Fragment table for sample 9 : 21-RT**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,642	1,909	64.3	13.5
28S	3,555	3,965	55.9	11.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 21-RF**

RNA Area: 460.5                      RNA Integrity Number (RIN): 7.8 (B.02.08)  
RNA Concentration: 673 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4              Result Flagging Label: RIN: 7.80

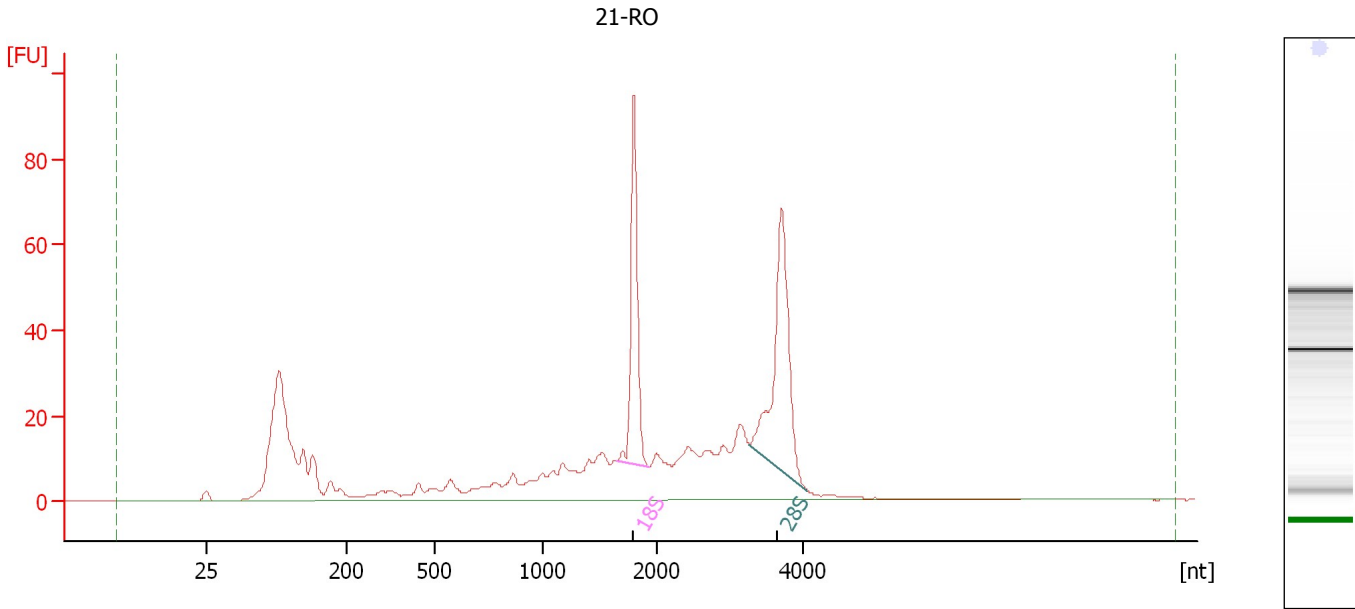
**Fragment table for sample 10 : 21-RF**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,723	1,908	62.6	13.6
28S	3,234	4,056	85.5	18.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 21-RO**

RNA Area:	654.7	RNA Integrity Number (RIN):	7.3 (B.02.08)
RNA Concentration:	957 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]:	1.3	Result Flagging Label:	RIN: 7.30

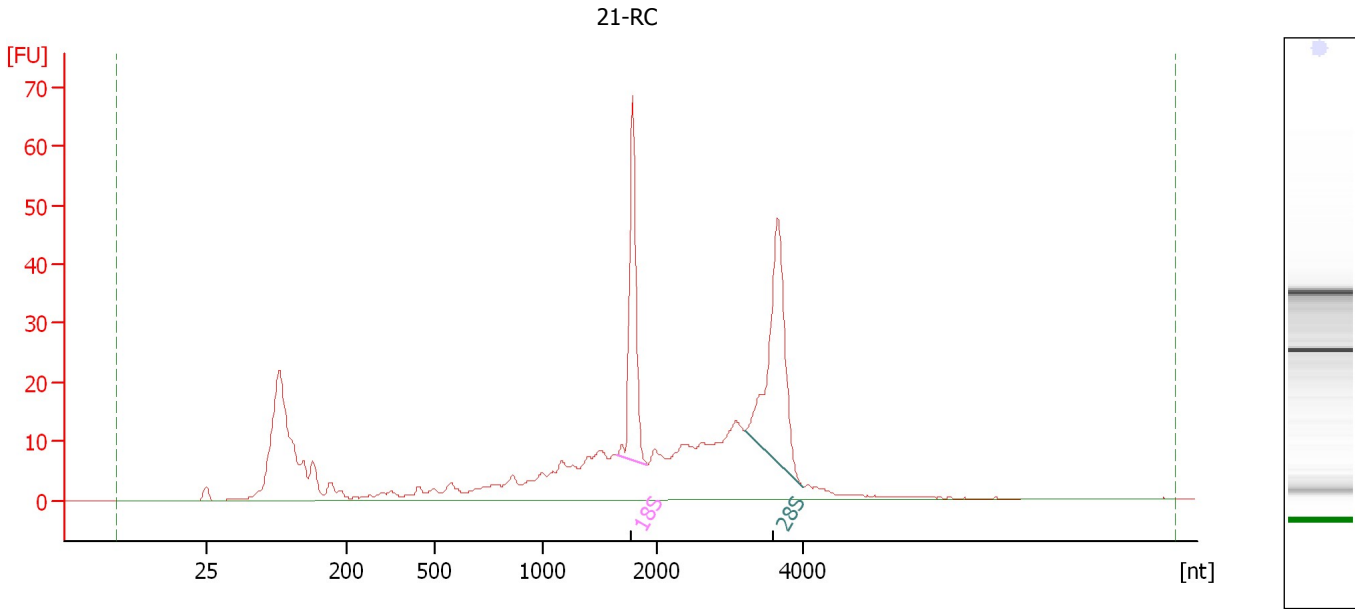
**Fragment table for sample 11 : 21-RO**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,644	1,923	71.6	10.9
28S	3,266	4,064	95.6	14.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 21-RC**

RNA Area:	481.1	RNA Integrity Number (RIN):	7.3 (B.02.08)
RNA Concentration:	703 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: 7.30

**Fragment table for sample 12 : 21-RC**

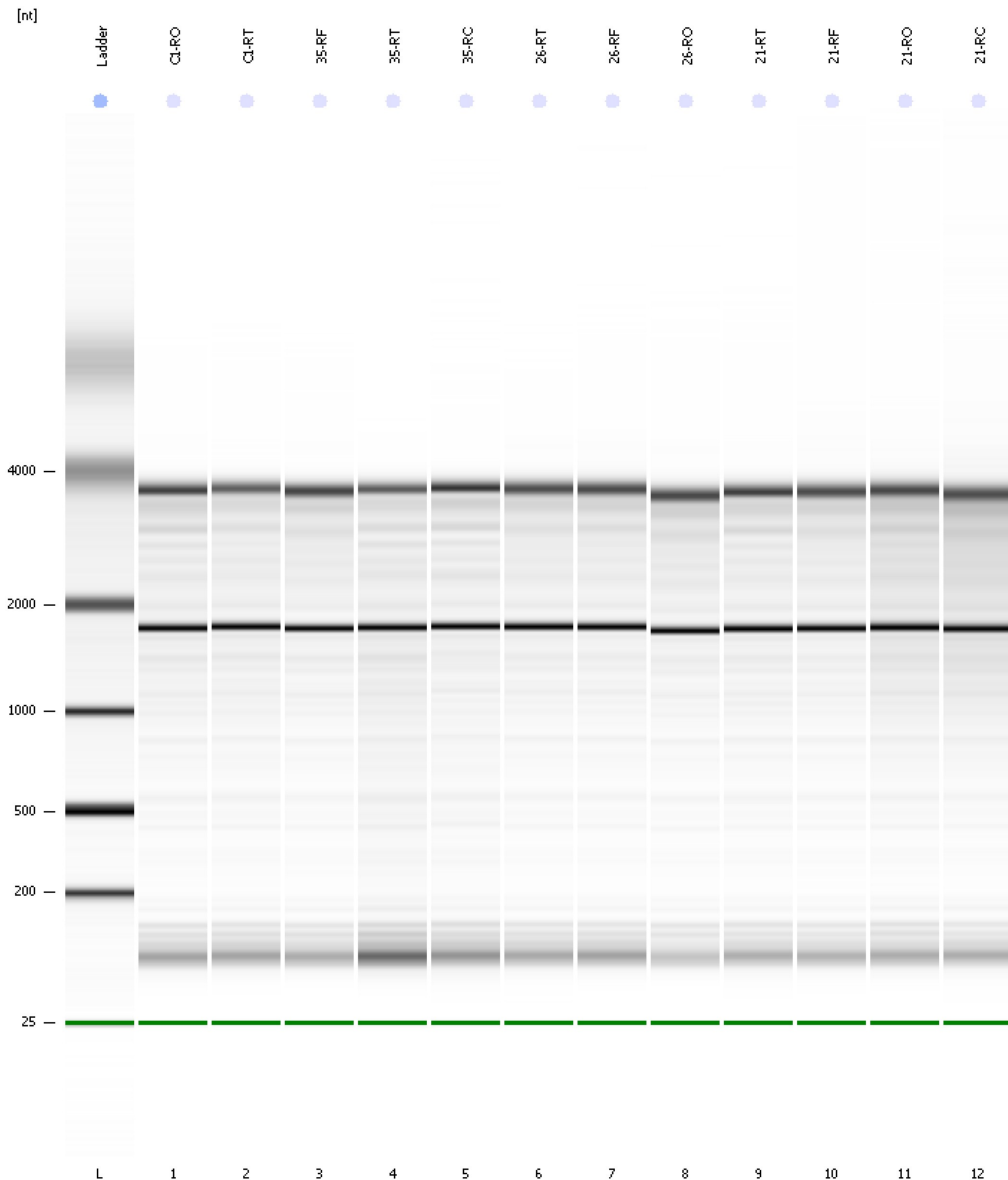
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,635	1,905	49.7	10.3
28S	3,193	4,005	71.5	14.9



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
Modified: 8/20/2013 4:39:35 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20\_003.xad

Created: 8/20/2013 4:15:41 PM  
 Modified: 8/20/2013 4:39:35 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		8/20/2013 4:39:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-20\2013-08-20_003.xad)		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/20/2013 4:15:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1