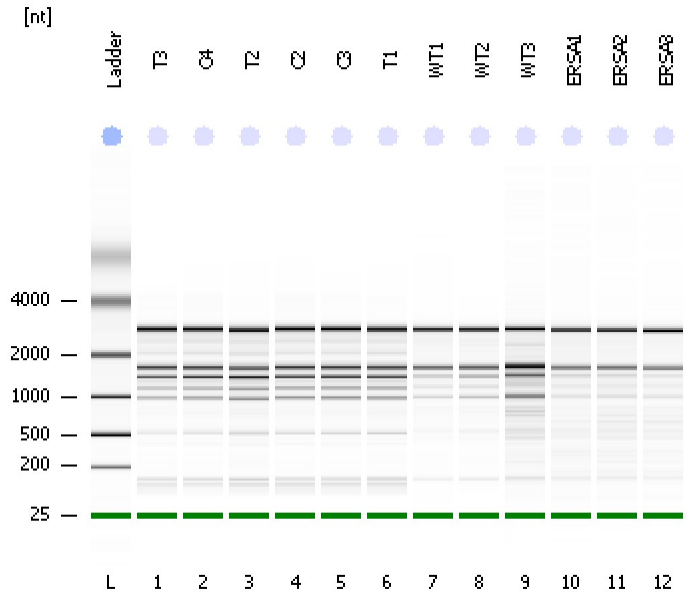


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

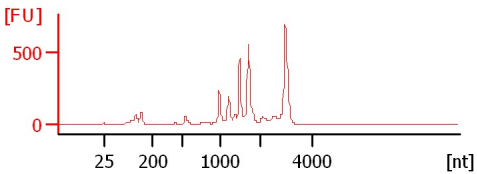
Assay Information:

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.

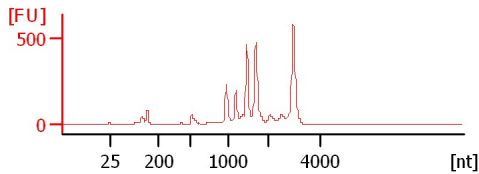
Chip Information:

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

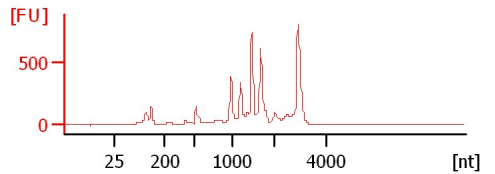
**T3**  
RIN: 7.10



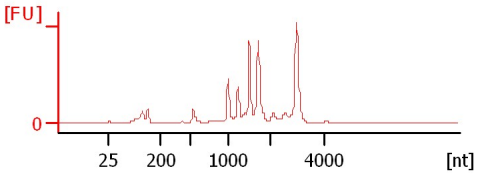
**C4**  
RIN: 6.90



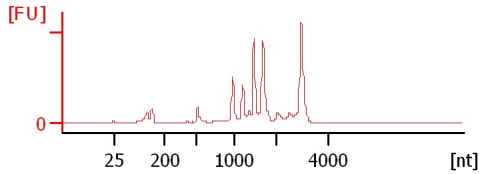
**T2**  
RIN: 7



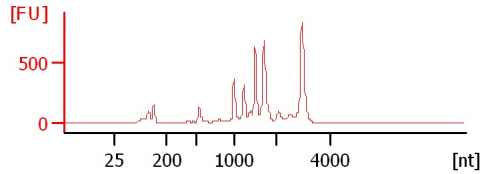
**C2**  
RIN: 6.80



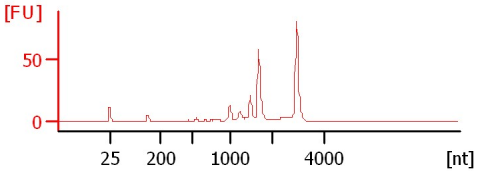
**C3**  
RIN: 7.20



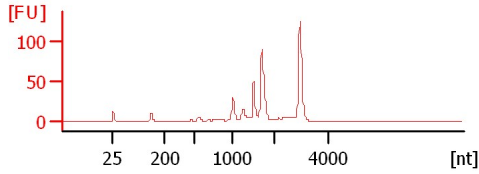
**T1**  
RIN: 6.90



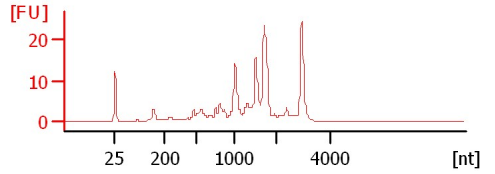
**WT1**  
RIN: 7.90



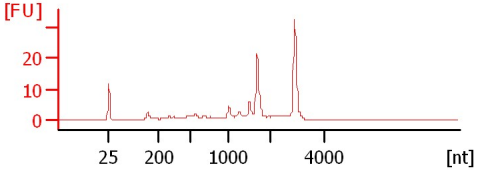
**WT2**  
RIN: 7.60



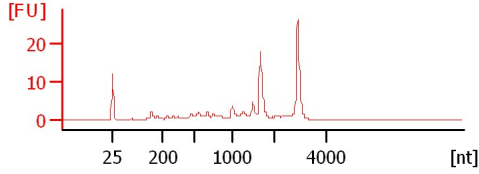
**WT3**  
RIN: 6.50



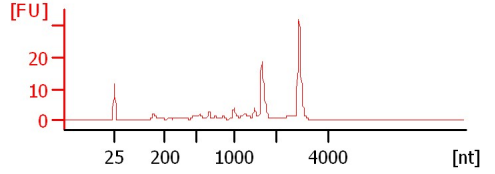
**ERSA1**  
RIN: 7.80



**ERSA2**  
RIN: 7.50



**ERSA3**  
RIN: 8



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
T3		✓	RIN: 7.10	
C4		✓	RIN: 6.90	
T2		✓	RIN:7	
C2		✓	RIN: 6.80	
C3		✓	RIN: 7.20	
T1		✓	RIN: 6.90	
WT1		✓	RIN: 7.90	
WT2		✓	RIN: 7.60	
WT3		✓	RIN: 6.50	
ERSA1		✓	RIN: 7.80	
ERSA2		✓	RIN: 7.50	
ERSA3		✓	RIN:8	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 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/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

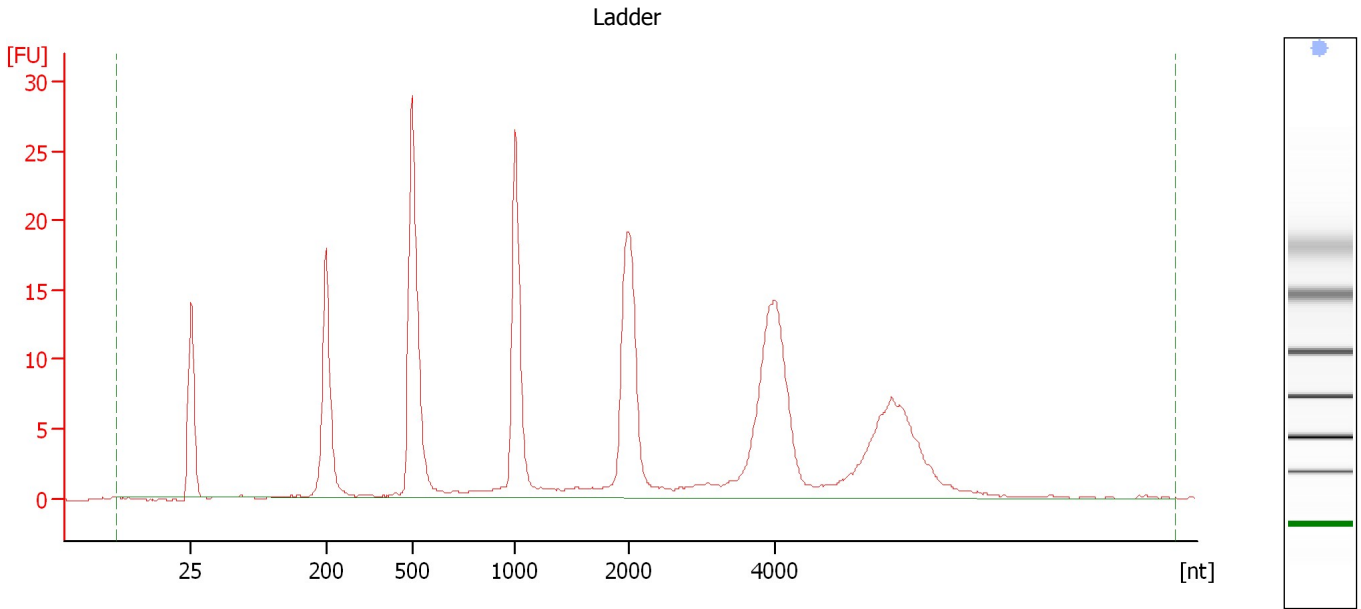
### Ladder

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\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary**



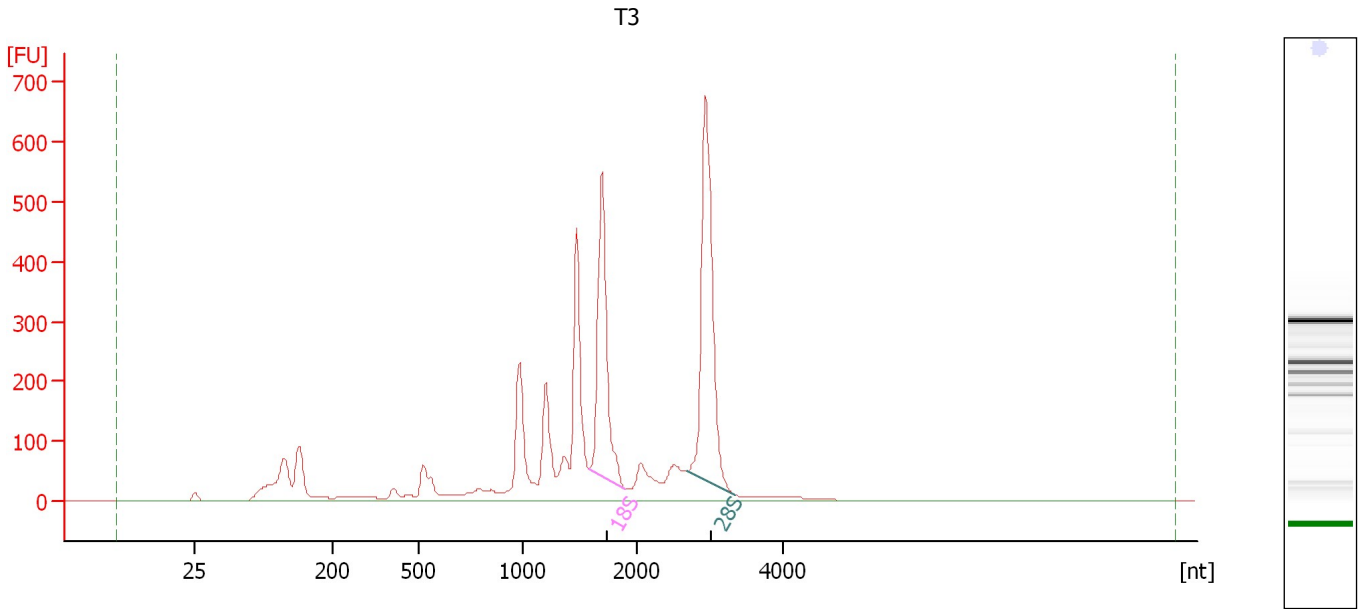
**Overall Results for Ladder**

RNA Area:	233.2	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\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : T3**

RNA Area: 3,767.2      RNA Integrity Number (RIN): 7.1 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 2,423 ng/μl  
rRNA Ratio [28s / 18s]: 1.4  
Result Flagging Color:   
Result Flagging Label: RIN: 7.10

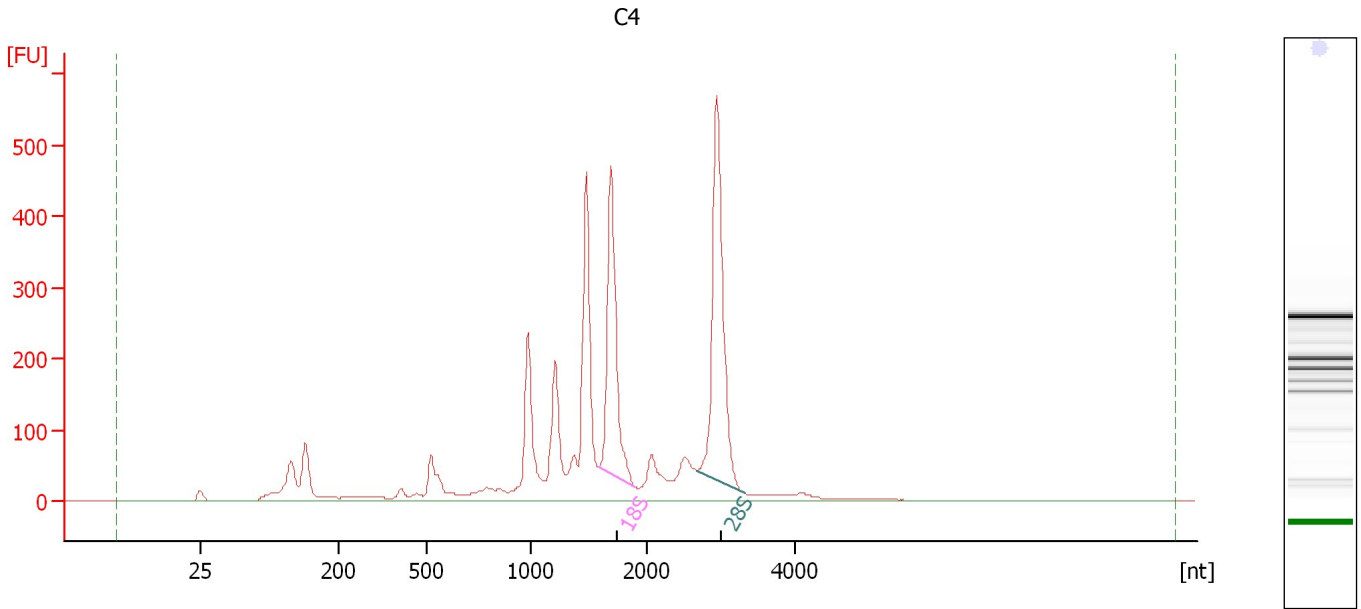
**Fragment table for sample 1 : T3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,583	1,901	564.6	15.0
28S	2,691	3,332	791.2	21.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : C4**

RNA Area:	3,366.6	RNA Integrity Number (RIN):	6.9 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	2,165 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: 6.90

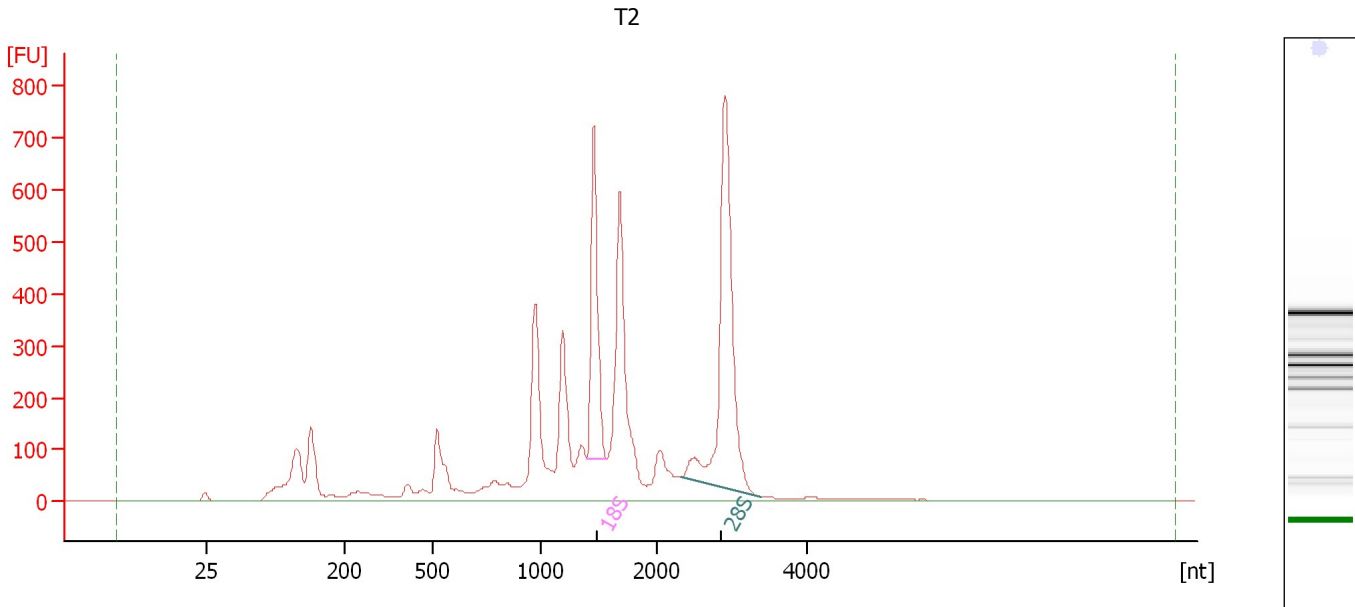
**Fragment table for sample 2 : C4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,583	1,897	472.9	14.0
28S	2,677	3,326	656.3	19.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
 Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : T2**

RNA Area:	5,302.8	RNA Integrity Number (RIN):	7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	3,411 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:7

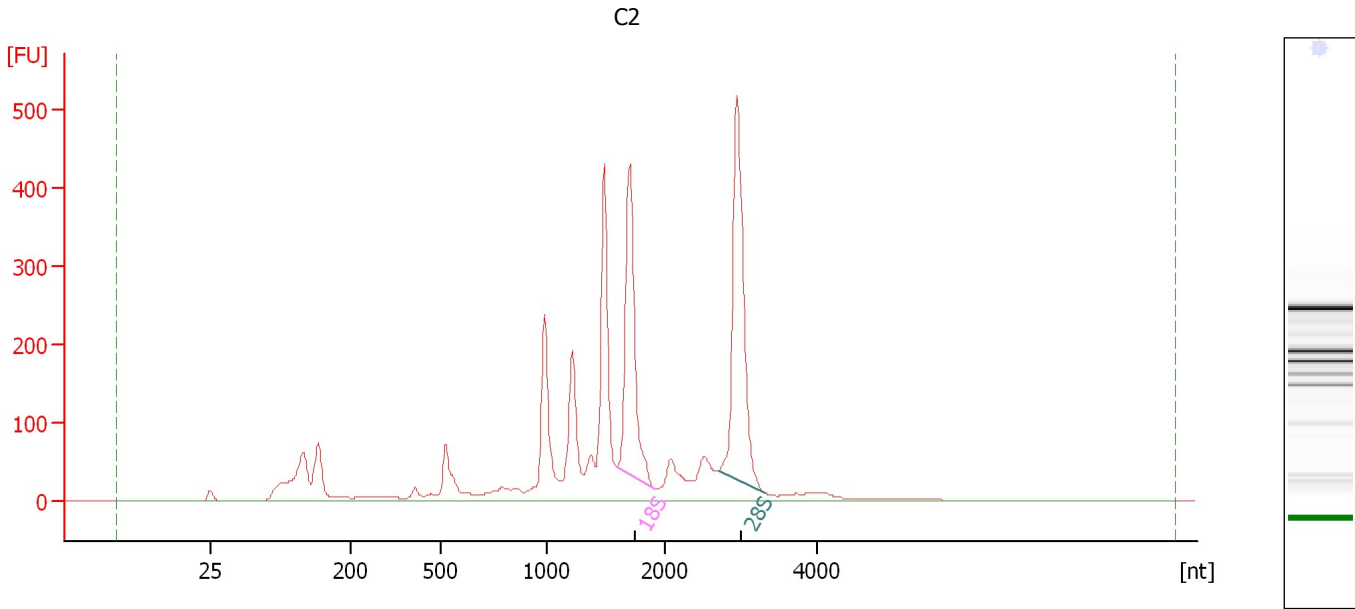
**Fragment table for sample 3 : T2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,400	1,565	535.6	10.1
28S	2,306	3,377	1,061.9	20.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : C2**

RNA Area:	3,175.4	RNA Integrity Number (RIN):	6.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	2,042 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: 6.80

**Fragment table for sample 4 : C2**

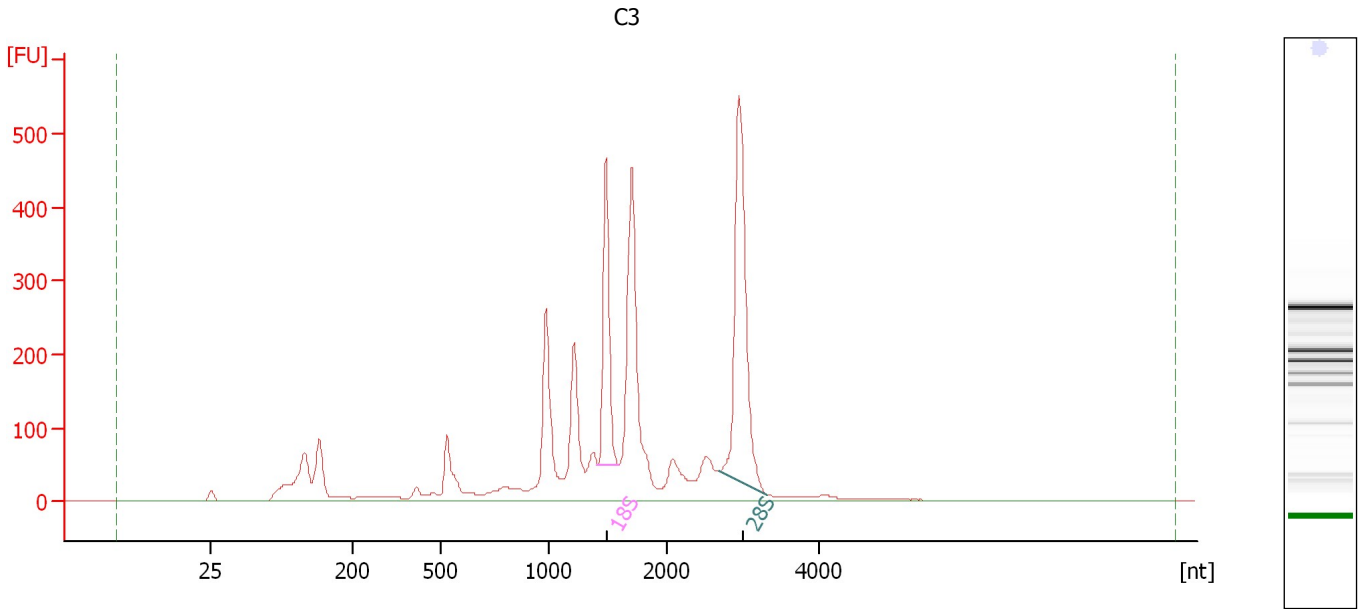
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,590	1,908	438.1	13.8
28S	2,706	3,314	580.5	18.3



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
 Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : C3**

RNA Area:	3,406.5	RNA Integrity Number (RIN):	7.2 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	2,191 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]:	1.8	Result Flagging Label:	RIN: 7.20

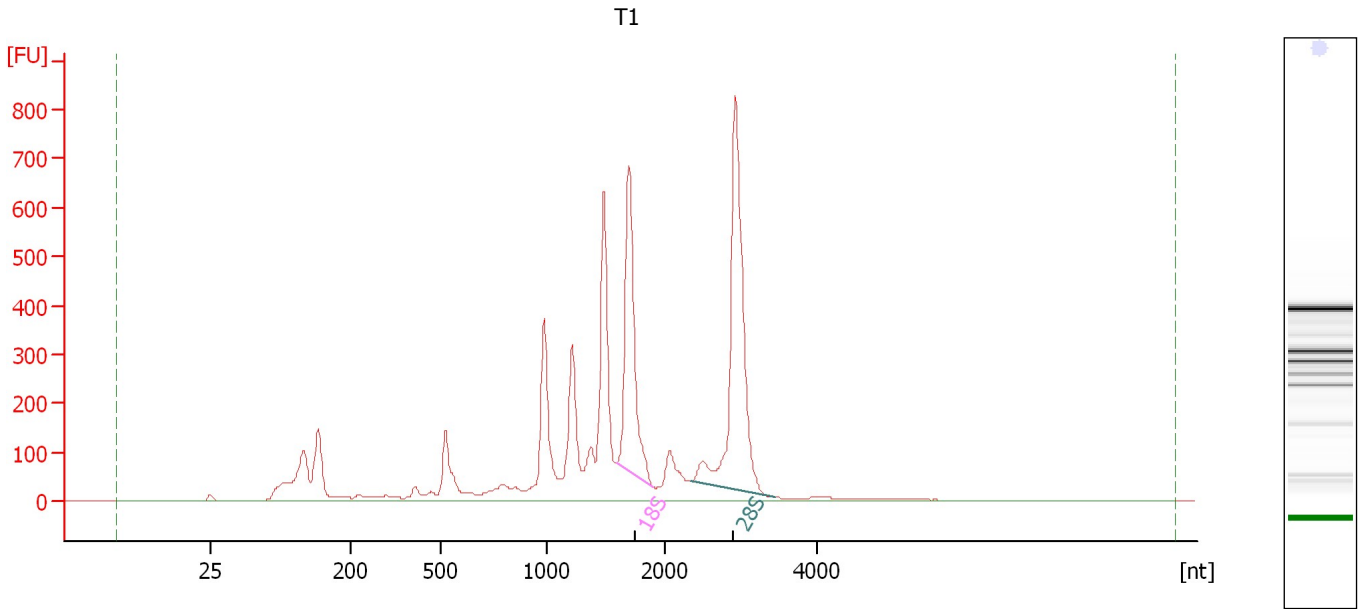
**Fragment table for sample 5 : C3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,411	1,583	337.1	9.9
28S	2,692	3,327	621.6	18.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
 Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : T1**

RNA Area:	5,239.1	RNA Integrity Number (RIN):	6.9 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	3,370 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: 6.90

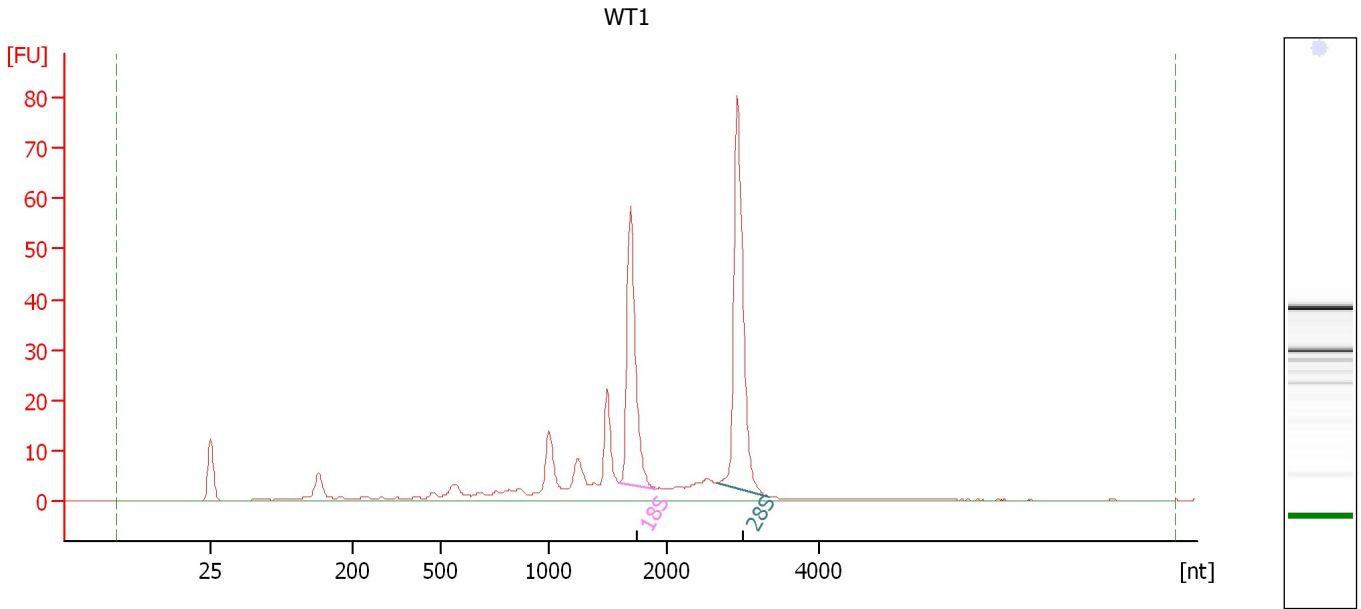
**Fragment table for sample 6 : T1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,581	1,899	695.4	13.3
28S	2,338	3,442	1,138.8	21.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : WT1**

RNA Area:	276.6	RNA Integrity Number (RIN):	7.9 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	178 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: 7.90

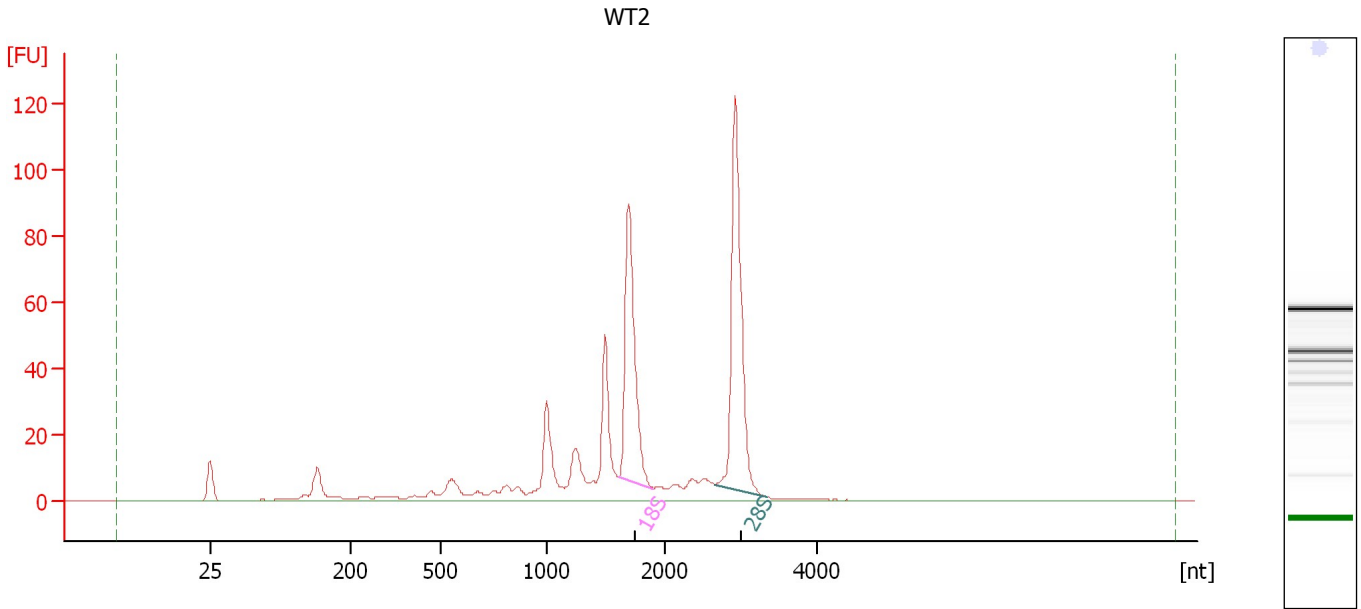
**Fragment table for sample 7 : WT1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,592	1,900	55.8	20.2
28S	2,649	3,341	78.8	28.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : WT2**

RNA Area:	495.3	RNA Integrity Number (RIN):	7.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	319 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: 7.60

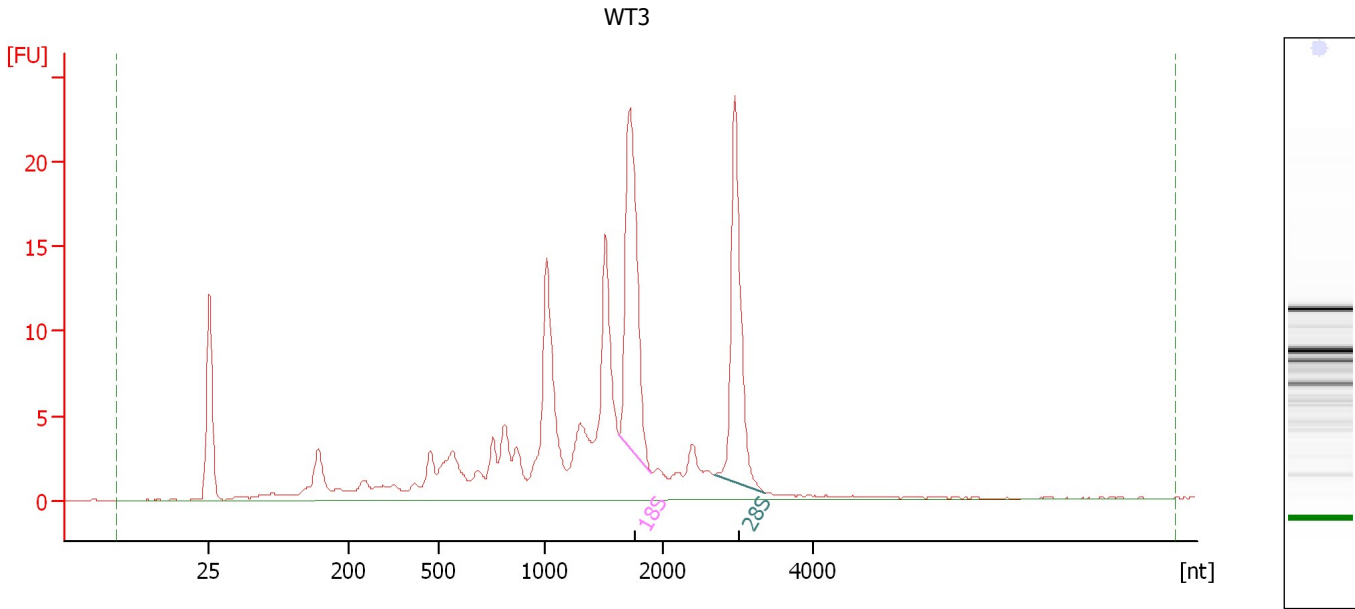
**Fragment table for sample 8 : WT2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,599	1,899	95.5	19.3
28S	2,663	3,343	126.2	25.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : WT3**

RNA Area: 186.2                      RNA Integrity Number (RIN): 6.5 (B.02.08,  
RNA Concentration: 120 ng/μl                      Anomaly Threshold(s)  
rRNA Ratio [28s / 18s]: 0.8                      manually adapted)  
Result Flagging Color:   
Result Flagging Label: RIN: 6.50

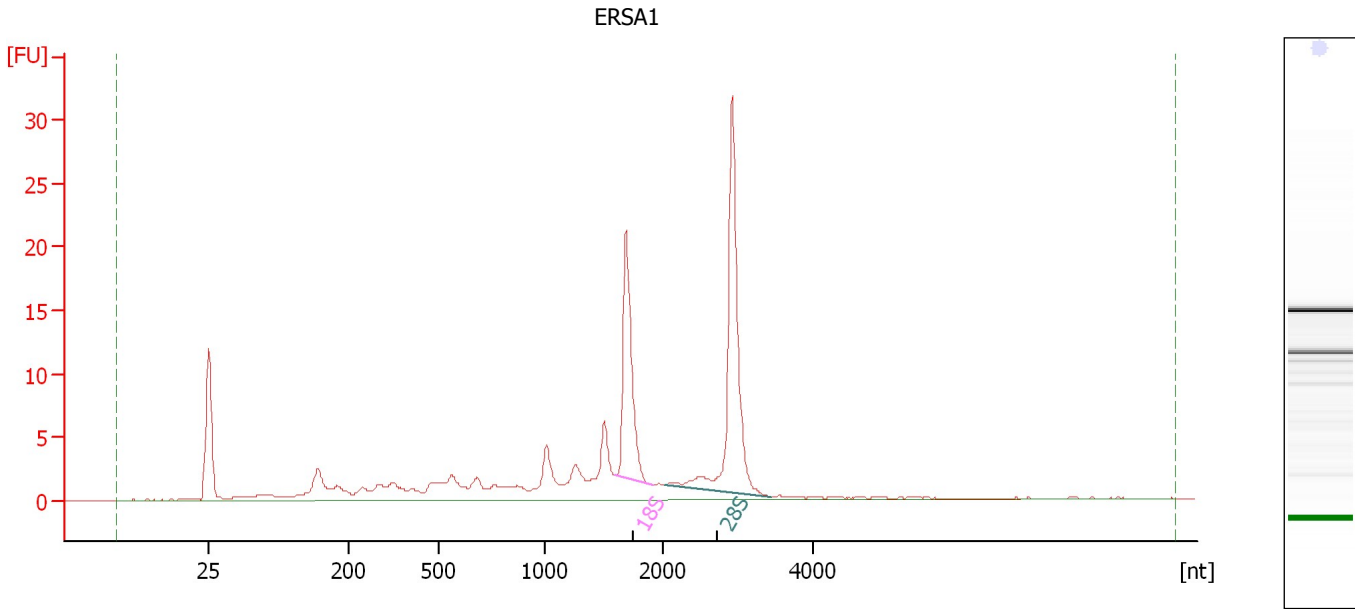
**Fragment table for sample 9 : WT3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,625	1,898	28.9	15.5
28S	2,678	3,358	24.3	13.1

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
 Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : ERSA1**

RNA Area:	130.5	RNA Integrity Number (RIN):	7.8 (B.02.08)
RNA Concentration:	84 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]:	1.8	Result Flagging Label:	RIN: 7.80

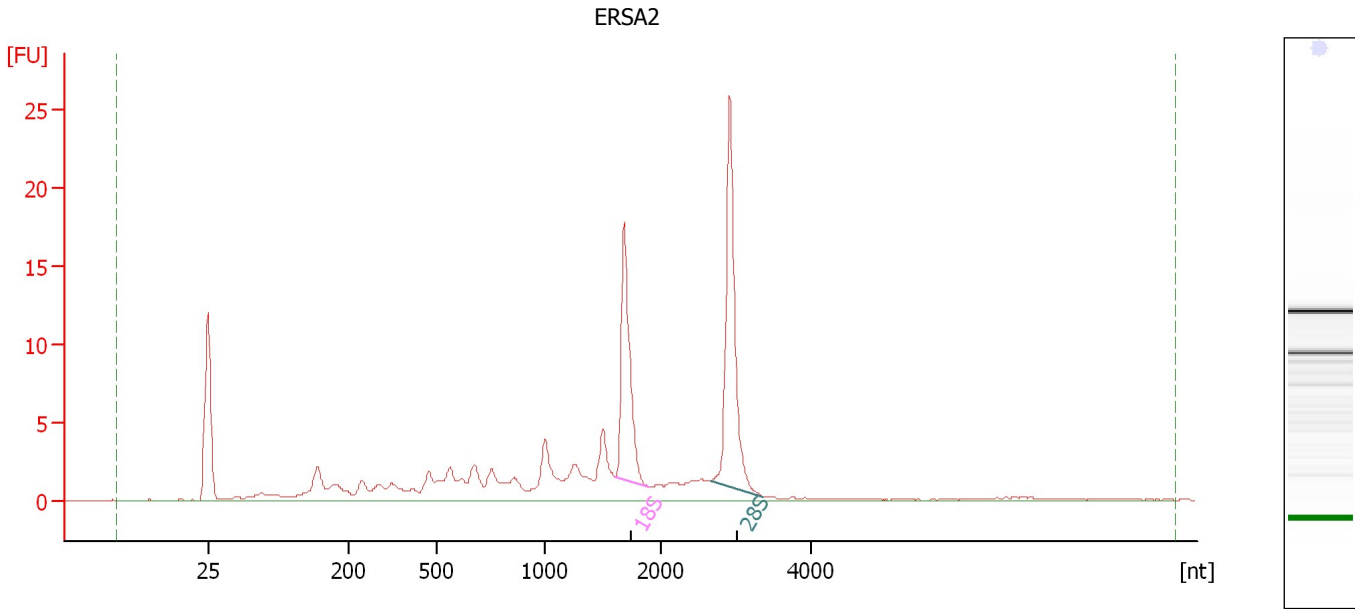
**Fragment table for sample 10 : ERSA1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,588	1,916	20.0	15.3
28S	2,025	3,429	35.1	26.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : ERS A2**

RNA Area: 117.8                      RNA Integrity Number (RIN): 7.5 (B.02.08)  
RNA Concentration: 76 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4                      Result Flagging Label: RIN: 7.50

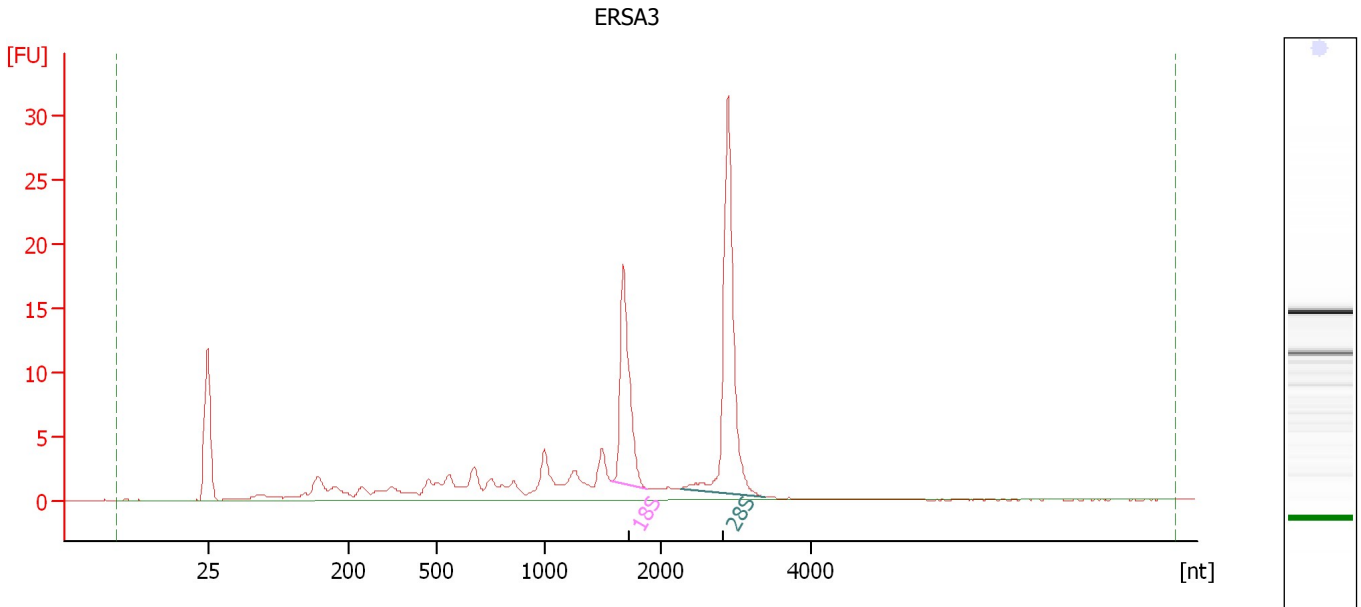
**Fragment table for sample 11 : ERS A2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,605	1,897	17.0	14.5
28S	2,663	3,360	24.6	20.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : ERS A3**

RNA Area: 117.2                      RNA Integrity Number (RIN): 8 (B.02.08)  
RNA Concentration: 75 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.8              Result Flagging Label: RIN:8

**Fragment table for sample 12 : ERS A3**

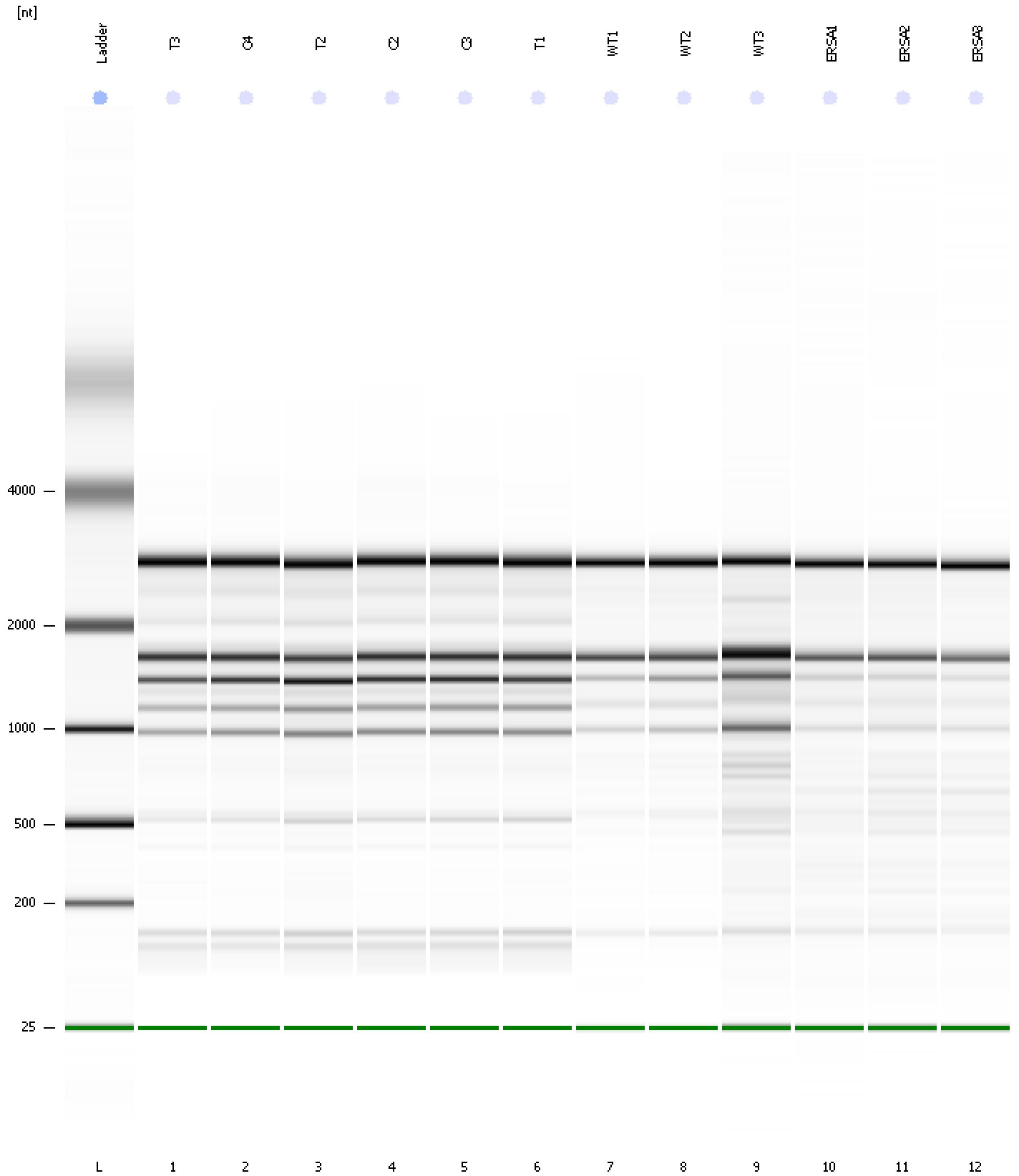
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,577	1,878	19.3	16.5
28S	2,251	3,388	34.3	29.3



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Gel Image**

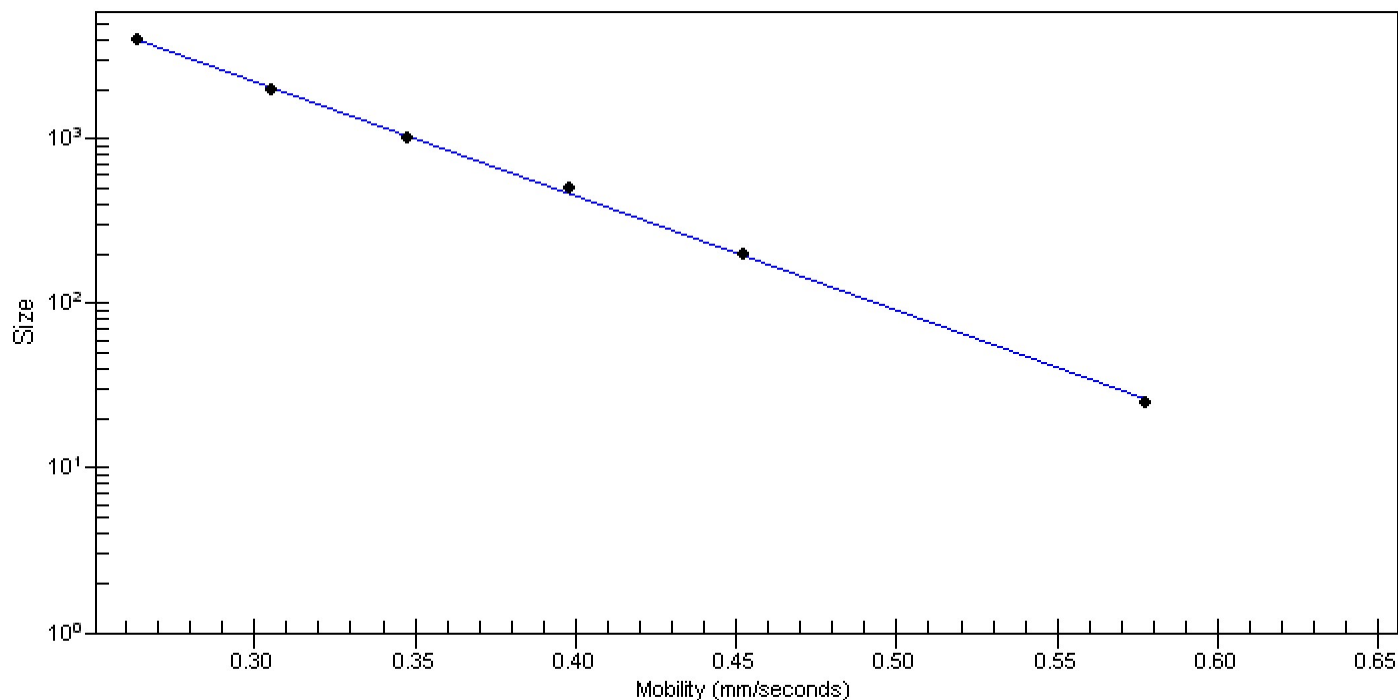


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
Modified: 3/27/2014 5:00:25 PM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-27\2014-03-27\_007.xad

Created: 3/27/2014 4:36:30 PM  
 Modified: 3/27/2014 5:00:25 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		3/27/2014 5:00:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-03-27\2014-03-27_007.xad)		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/27/2014 4:36:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1