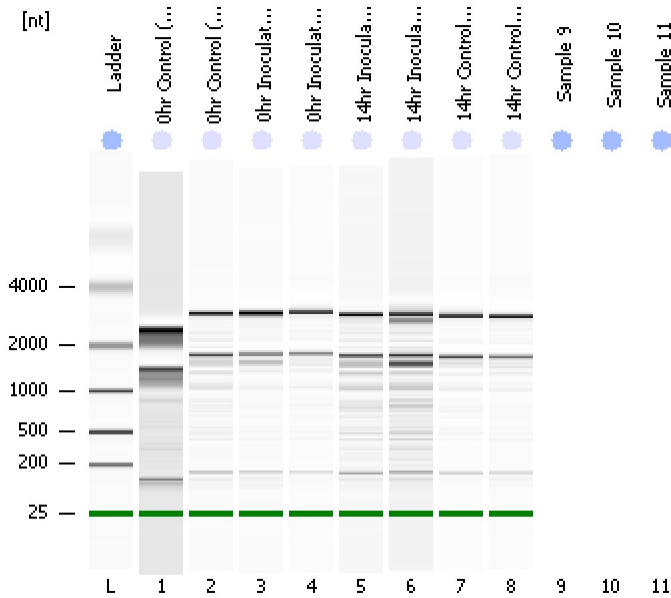


Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
 Modified: 3/17/2014 11:57:34 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

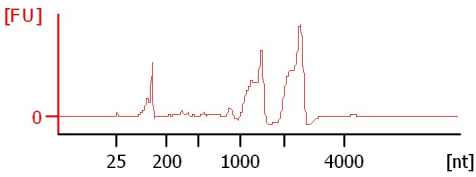
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Pico Series II.xsy  
 Assay Class: Eukaryote Total RNA Pico  
 Version: 2.6  
 Assay Comments: Total RNA Analysis pg sensitivity (Eukaryote)  
 © Copyright 2003 - 2009 Agilent Technologies, Inc.

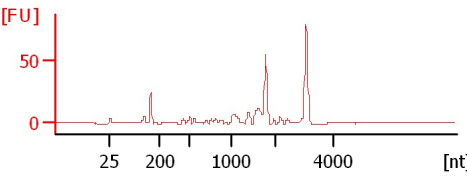
Chip Information:

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

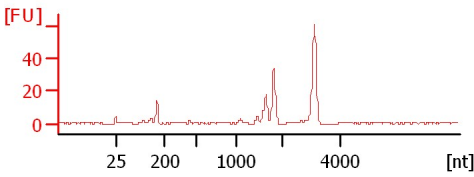
**0hr Control (3) Root**  
 RIN: 6.60



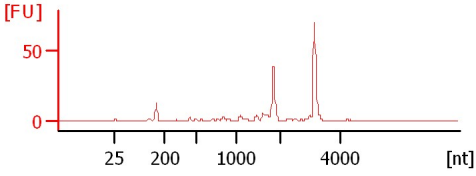
**0hr Control (4) Root**  
 RIN: 6.50



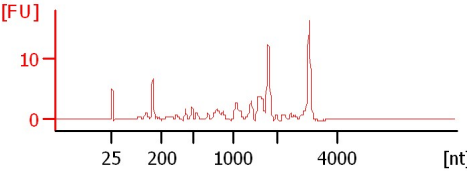
**0hr Inoculated (1) Root**  
 RIN: 7.60



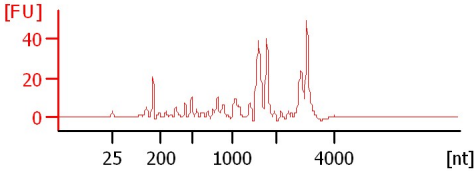
**0hr Inoculated (2) Root**  
 RIN: 1.20



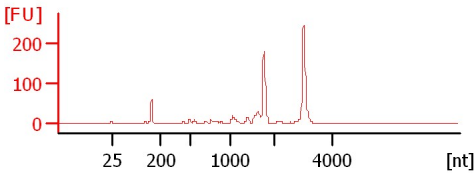
**14hr Inoculated (11) Root**  
 RIN: 6.20



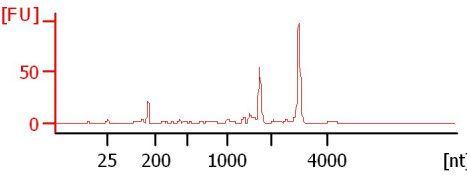
**14hr Inoculated (12) Root**  
 RIN: 4.70



**14hr Control (19) Root**  
 RIN: 7.40



**14hr Control (20) Root**  
 RIN: 7.60



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
0hr Control (3) Root		✓	RIN: 6.60	
0hr Control (4) Root		✓	RIN: 6.50	
0hr Inoculated (1) Root		✓	RIN: 7.60	
0hr Inoculated (2) Root		✓	RIN: 1.20	
14hr Inoculated (11) Root		✓	RIN: 6.20	
14hr Inoculated (12) Root		✓	RIN: 4.70	
14hr Control (19) Root		✓	RIN: 7.40	
14hr Control (20) Root		✓	RIN: 7.60	
Sample 9				
Sample 10				
Sample 11				
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

## Electrophoresis Assay Details

### General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 17  
Maximum Visible Range [s] : 70  
Start Analysis Time Range [s] : 18  
End Analysis Time Range [s] : 69  
Ladder Concentration [pg/ $\mu$ l] : 1000  
Lower Marker Concentration [pg/ $\mu$ l] : 0  
Upper Marker Concentration [pg/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 18  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.3  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

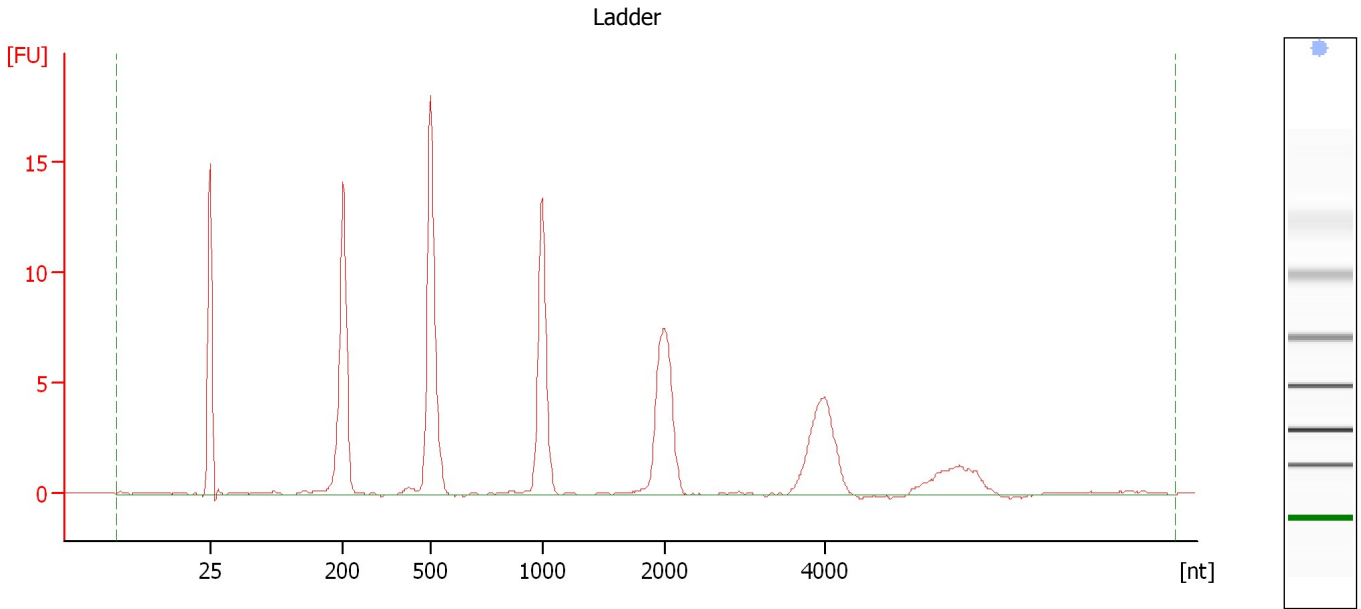
### Ladder

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

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary**



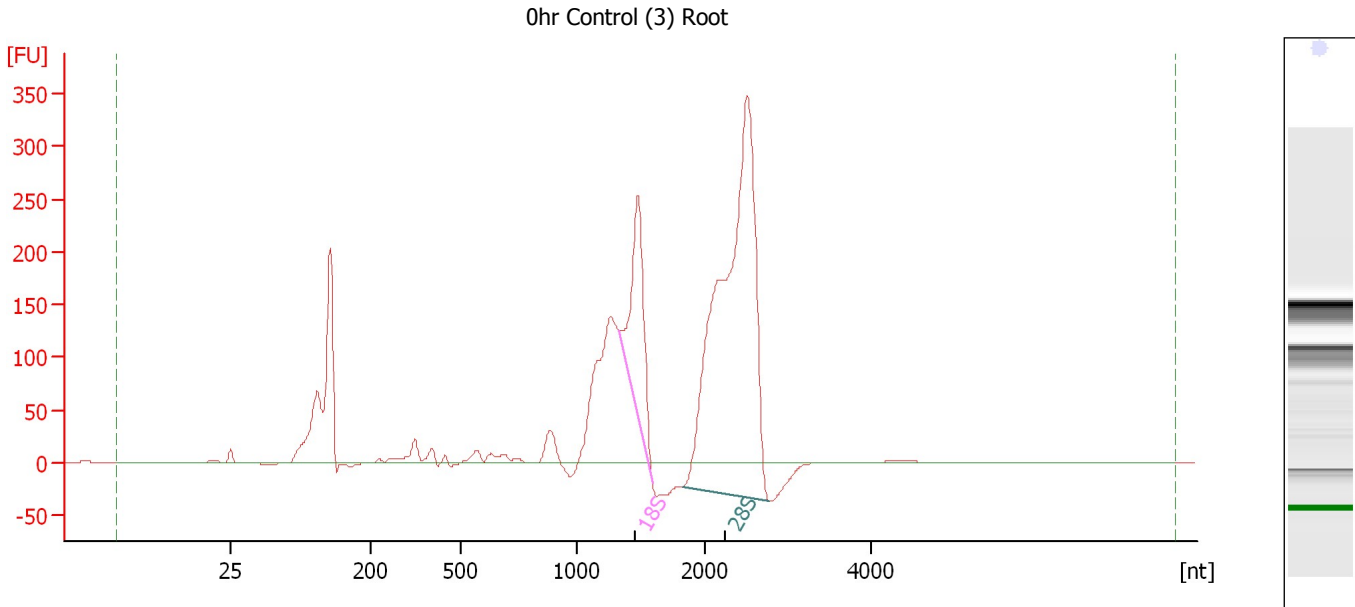
**Overall Results for Ladder**

RNA Area:	90.3	Result Flagging Color:	<span style="background-color: blue; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	1,000 pg/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 0hr Control (3) Root**

RNA Area: 2,586.8                      RNA Integrity Number (RIN): 6.6 (B.02.08)  
RNA Concentration: 28,638 pg/µl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 4.5                      Result Flagging Label: RIN: 6.60

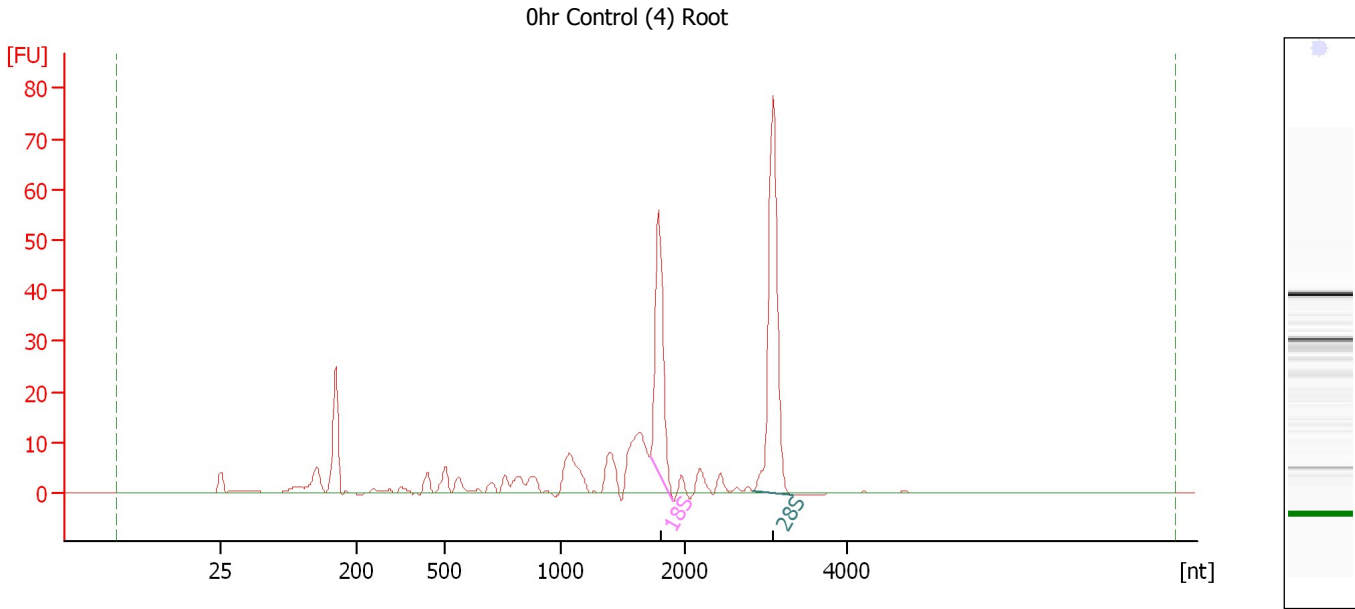
**Fragment table for sample 1 : 0hr Control (3) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,328	1,588	313.3	12.1
28S	1,833	2,782	1,402.9	54.2

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 0hr Control (4) Root**

RNA Area: 252.6 RNA Integrity Number (RIN): 6.5 (B.02.08)  
RNA Concentration: 2,797 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5 Result Flagging Label: RIN: 6.50

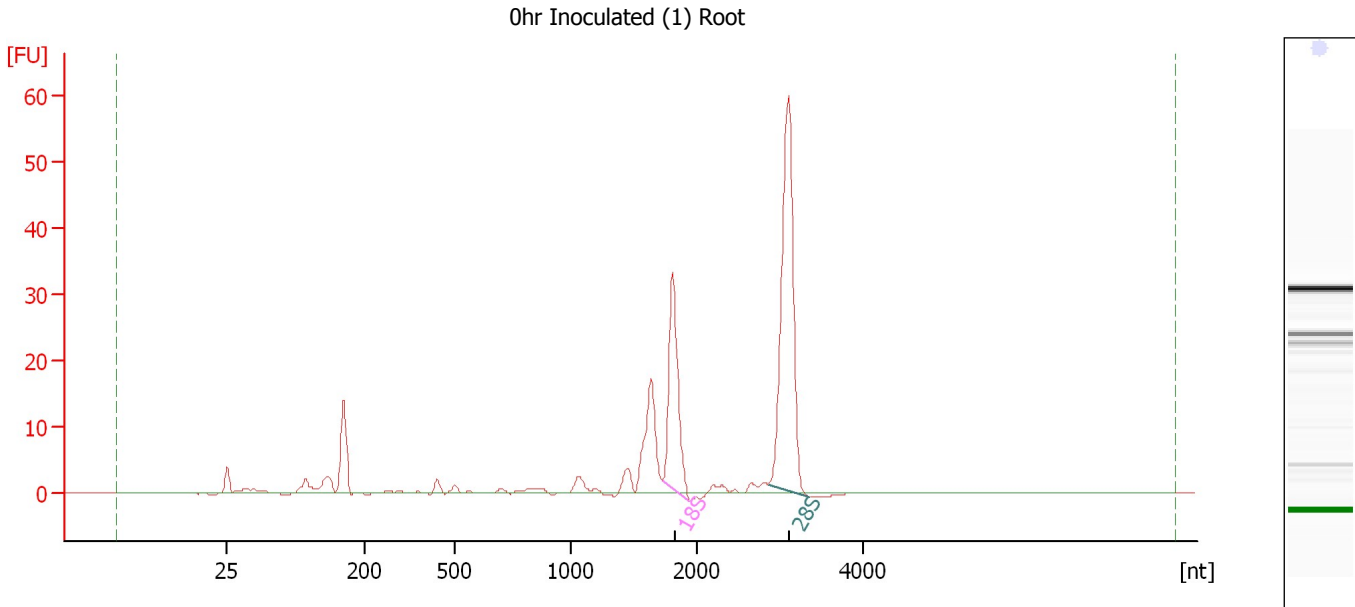
**Fragment table for sample 2 : 0hr Control (4) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,725	1,914	47.4	18.8
28S	2,836	3,333	72.8	28.8

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
 Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 0hr Inoculated (1) Root**

RNA Area:	176.8	RNA Integrity Number (RIN):	7.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,958 pg/μl		
rRNA Ratio [28s / 18s]:	2.1	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
		Result Flagging Label:	RIN: 7.60

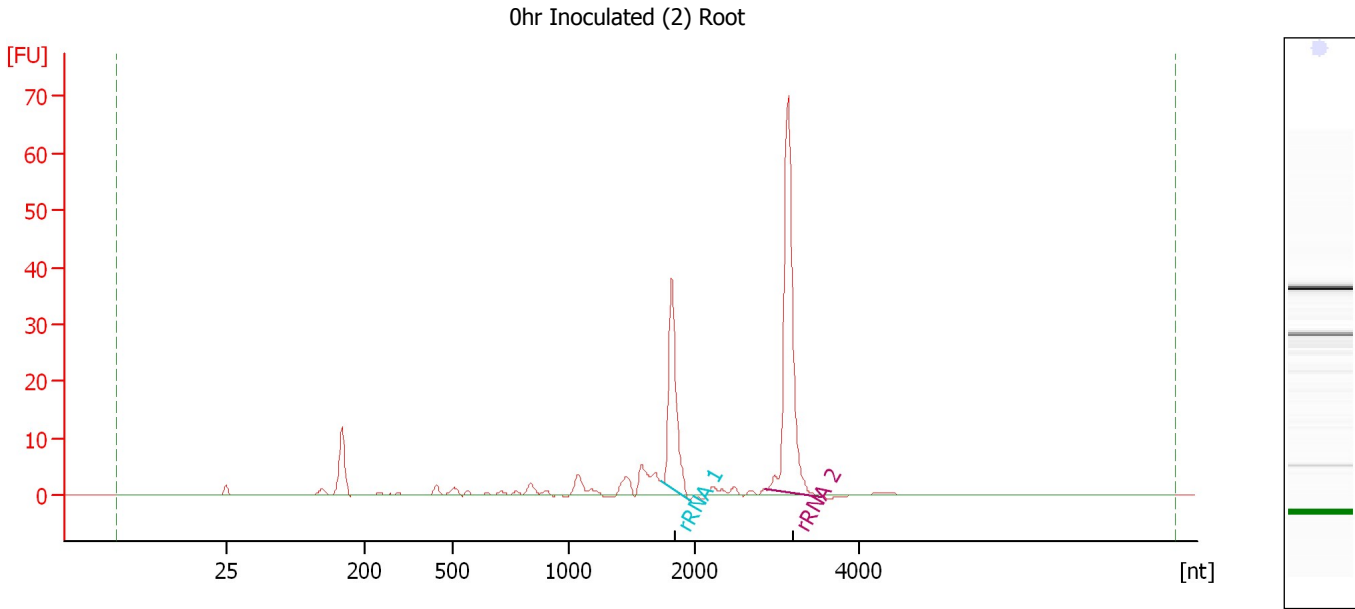
**Fragment table for sample 3 : 0hr Inoculated (1) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,726	1,946	34.8	19.7
28S	2,873	3,364	72.6	41.0

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 0hr Inoculated (2) Root**

RNA Area: 143.1                      RNA Integrity Number (RIN): 1.2 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 1,584 pg/μl  
rRNA Ratio [28s / 18s]: 0.0  
Result Flagging Color:   
Result Flagging Label: RIN: 1.20

**Fragment table for sample 4 : 0hr Inoculated (2) Root**

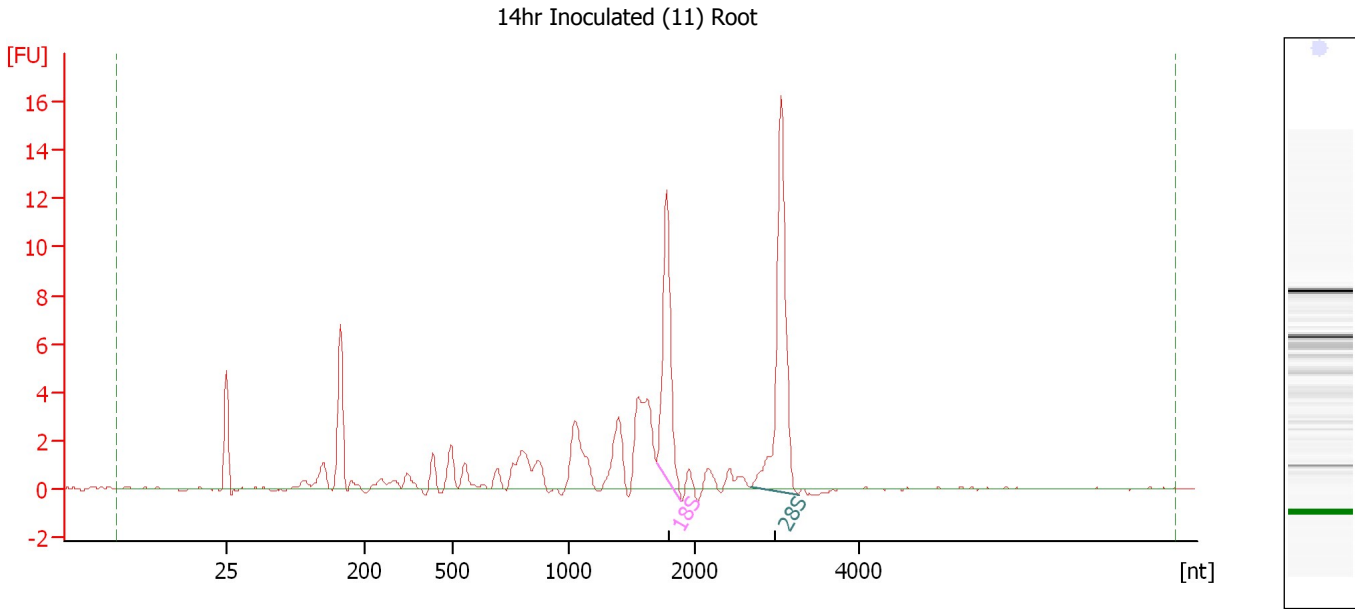
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,731	1,976	33.0	23.1
rRNA 2	2,858	3,528	61.5	43.0



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 14hr Inoculated (11) Root**

RNA Area: 67.5 RNA Integrity Number (RIN): 6.2 (B.02.08)  
RNA Concentration: 747 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN: 6.20

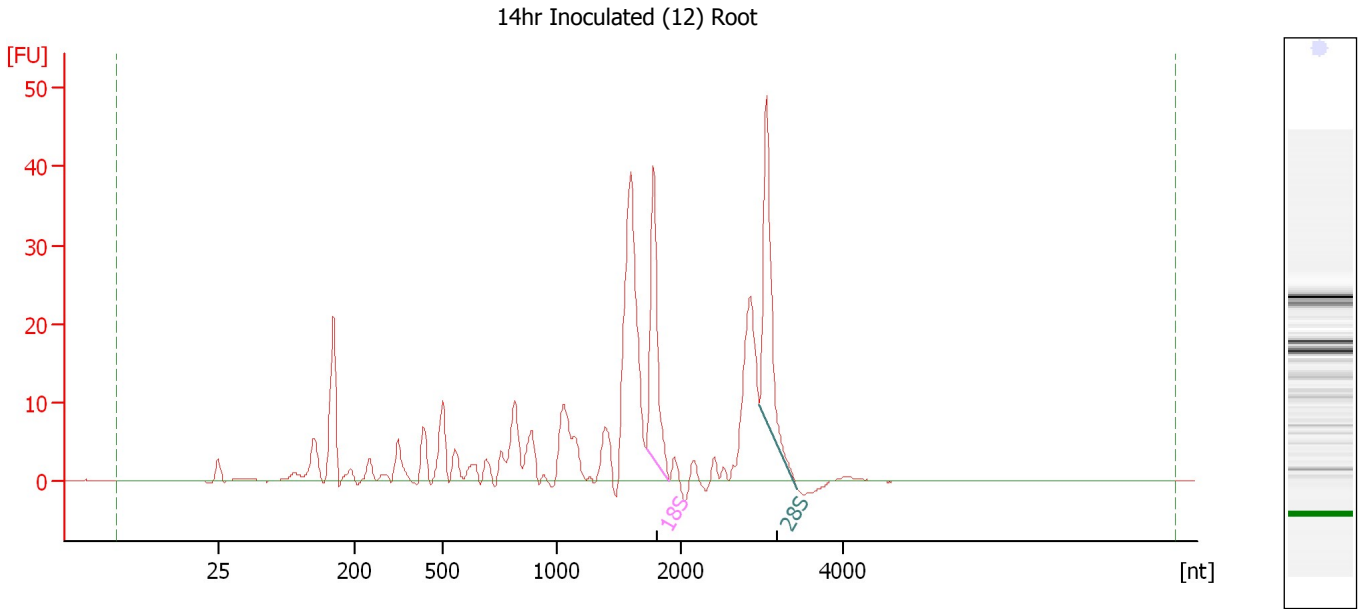
**Fragment table for sample 5 : 14hr Inoculated (11) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,699	1,894	11.4	16.9
28S	2,680	3,262	16.1	23.9

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 14hr Inoculated (12) Root**

RNA Area: 302.3 RNA Integrity Number (RIN): 4.7 (B.02.08)  
RNA Concentration: 3,347 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.0 Result Flagging Label: RIN: 4.70

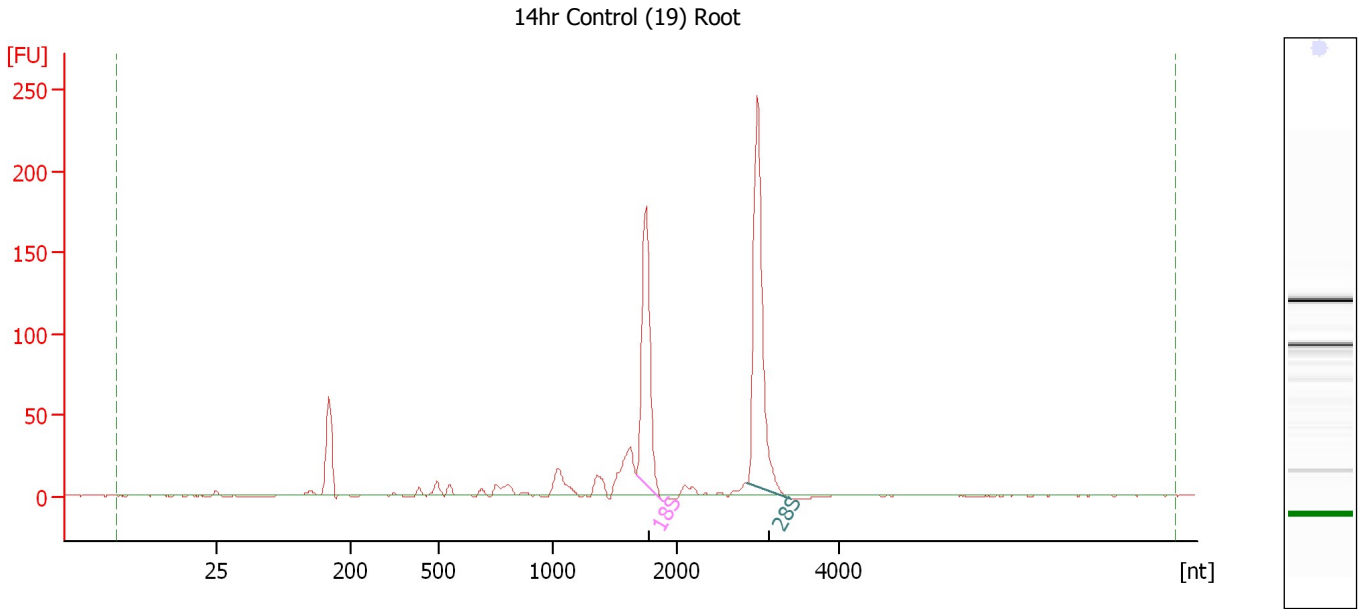
**Fragment table for sample 6 : 14hr Inoculated (12) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,722	1,912	32.8	10.8
28S	2,968	3,440	33.6	11.1

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
 Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 14hr Control (19) Root**

RNA Area:	635.8	RNA Integrity Number (RIN):	7.4 (B.02.08)
RNA Concentration:	7,039 pg/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: 7.40

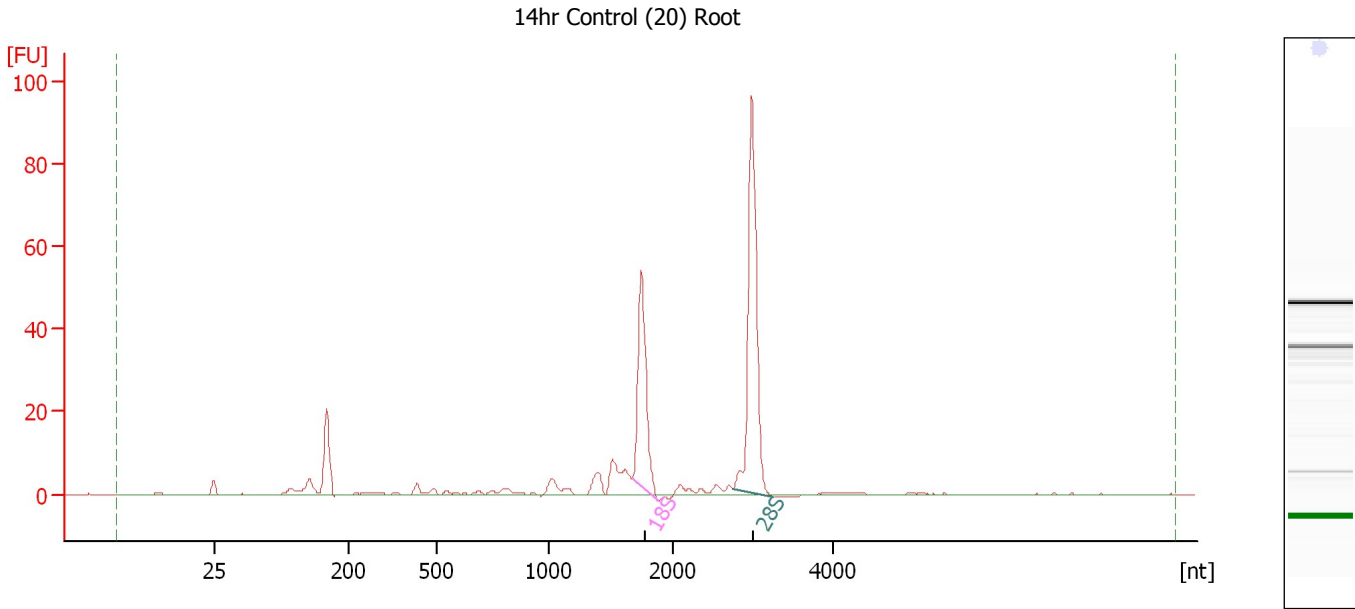
**Fragment table for sample 7 : 14hr Control (19) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,676	1,893	162.4	25.5
28S	2,877	3,404	225.0	35.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 14hr Control (20) Root**

RNA Area: 214.2 RNA Integrity Number (RIN): 7.6 (B.02.08)  
RNA Concentration: 2,372 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 7.60

**Fragment table for sample 8 : 14hr Control (20) Root**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,673	1,890	51.3	23.9
28S	2,746	3,248	85.6	40.0

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-03-17\2014-03-17\_001.xad

Created: 3/17/2014 11:31:52 AM  
Modified: 3/17/2014 11:57:34 AM

**Invalid Samples**

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.