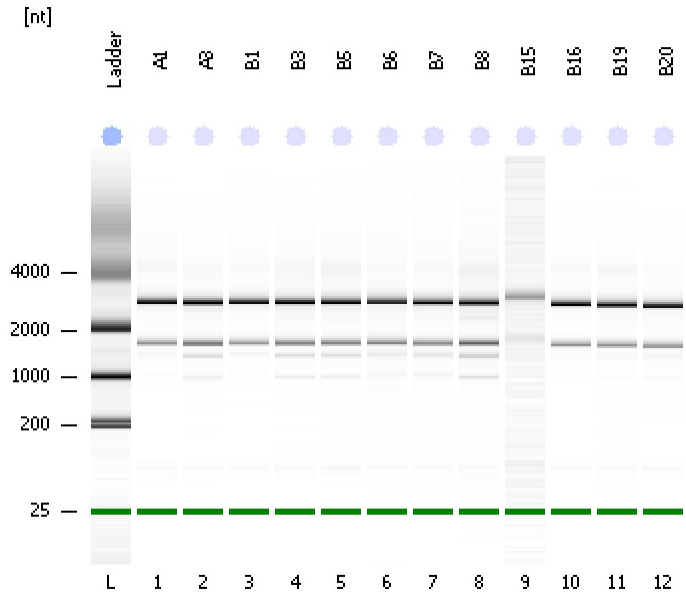


Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 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\Plant RNA Nano.xsy

Assay Class: Plant RNA Nano

Version: 1.3

Assay Comments: Total RNA Analysis ng sensitivity (Plant)

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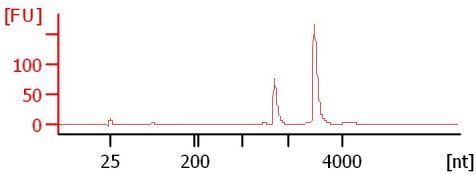
Chip Information:

Chip Lot #:

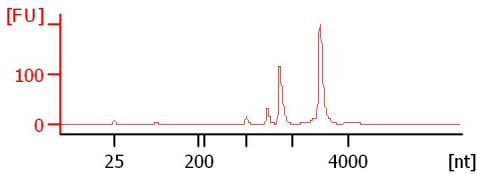
Reagent Kit Lot #:

Chip Comments:

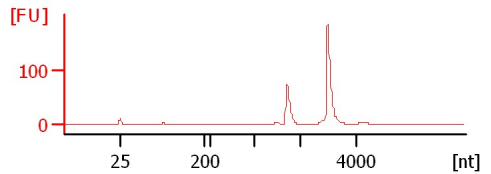
**A1**  
RIN: 9.70



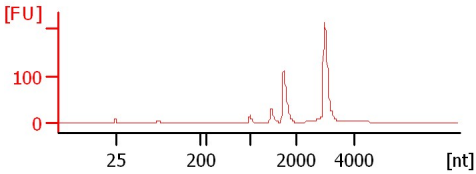
**A3**  
RIN: 9.40



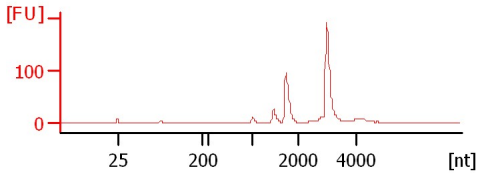
**B1**  
RIN: 9.50



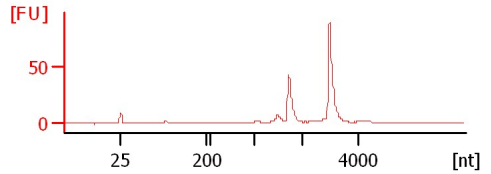
**B3**  
RIN: 9.30



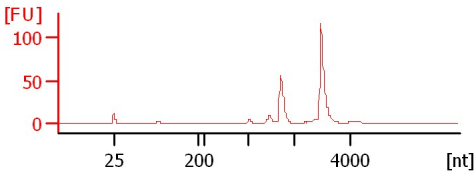
**B5**  
RIN: 9.20



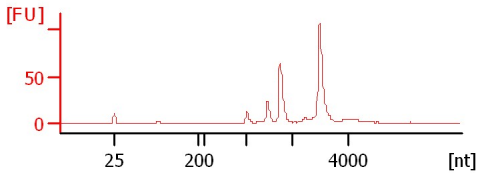
**B6**  
RIN: 9.10



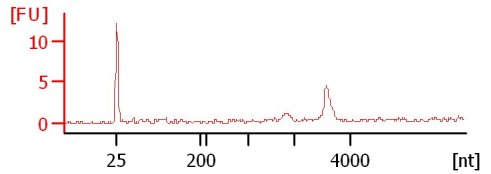
**B7**  
RIN: 9.20



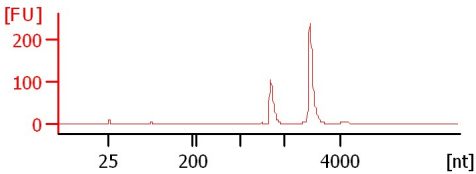
**B8**  
RIN: 9.10



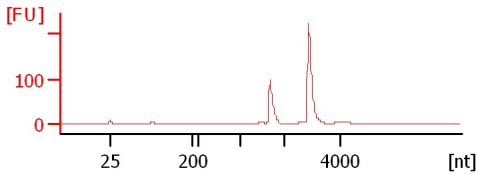
**B15**  
RIN: 8.30



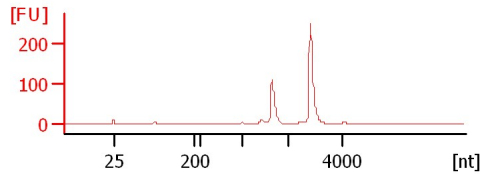
**B16**  
RIN: 9.60



**B19**  
RIN: 9.40



**B20**  
RIN: 9.30



Assay Class: Plant RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
 Modified: 7/11/2013 10:13:24 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
A1		✓	RIN: 9.70	
A3		✓	RIN: 9.40	
B1		✓	RIN: 9.50	
B3		✓	RIN: 9.30	
B5		✓	RIN: 9.20	
B6		✓	RIN: 9.10	
B7		✓	RIN: 9.20	
B8		✓	RIN: 9.10	
B15		✓	RIN: 8.30	
B16		✓	RIN: 9.60	
B19		✓	RIN: 9.40	
B20		✓	RIN: 9.30	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 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/ $\mu$ 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] : 0.2  
Area Threshold : 0.1  
Width Threshold [s] : 0.2  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

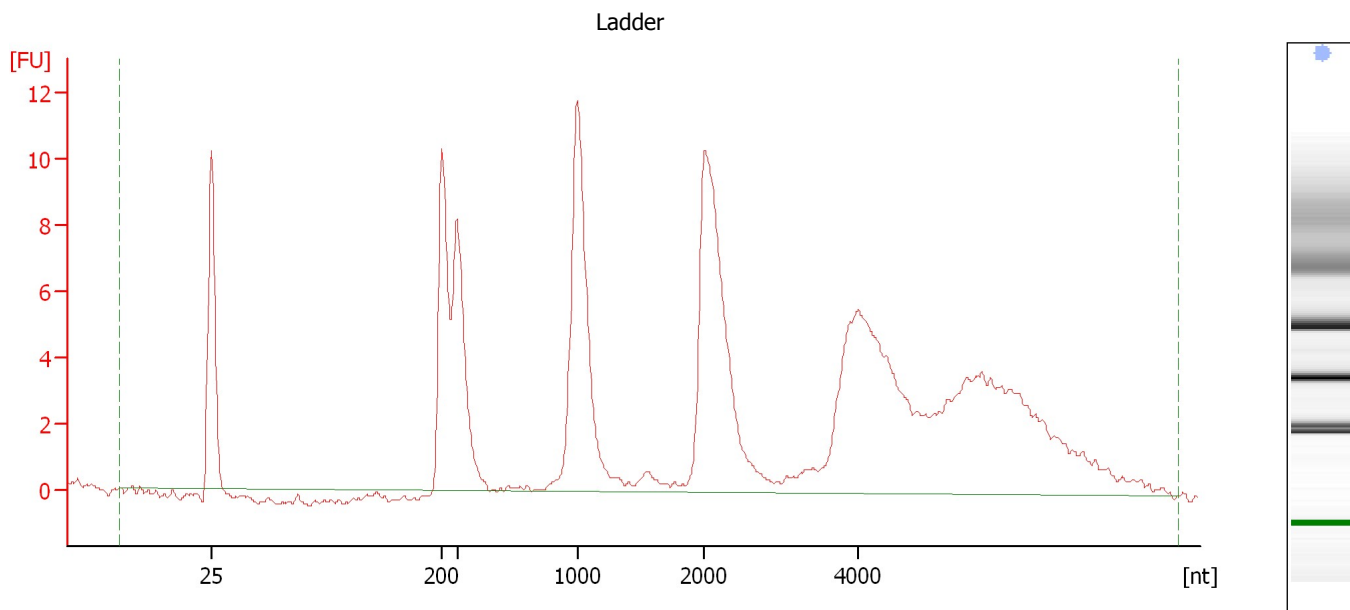
### Ladder

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

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary**



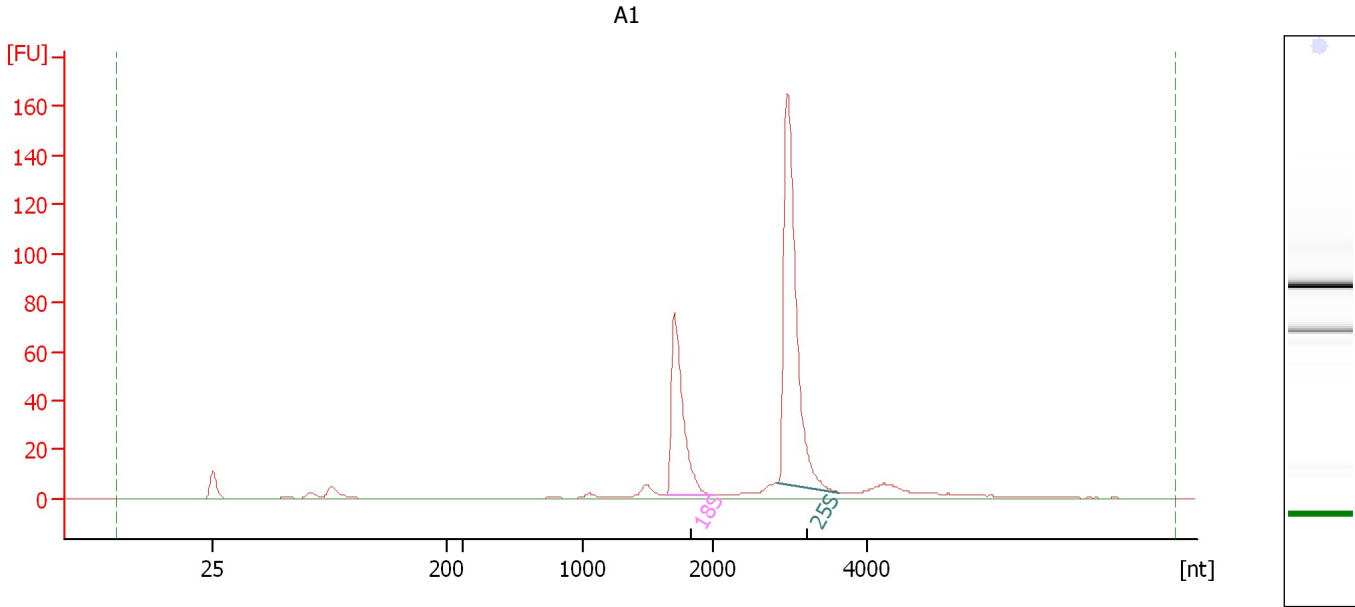
**Overall Results for Ladder**

RNA Area:	157.8	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: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : A1**

RNA Area: 421.7                      RNA Integrity Number (RIN): 9.7 (B.02.08)  
RNA Concentration: 401 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 2.1                      Result Flagging Label: RIN: 9.70

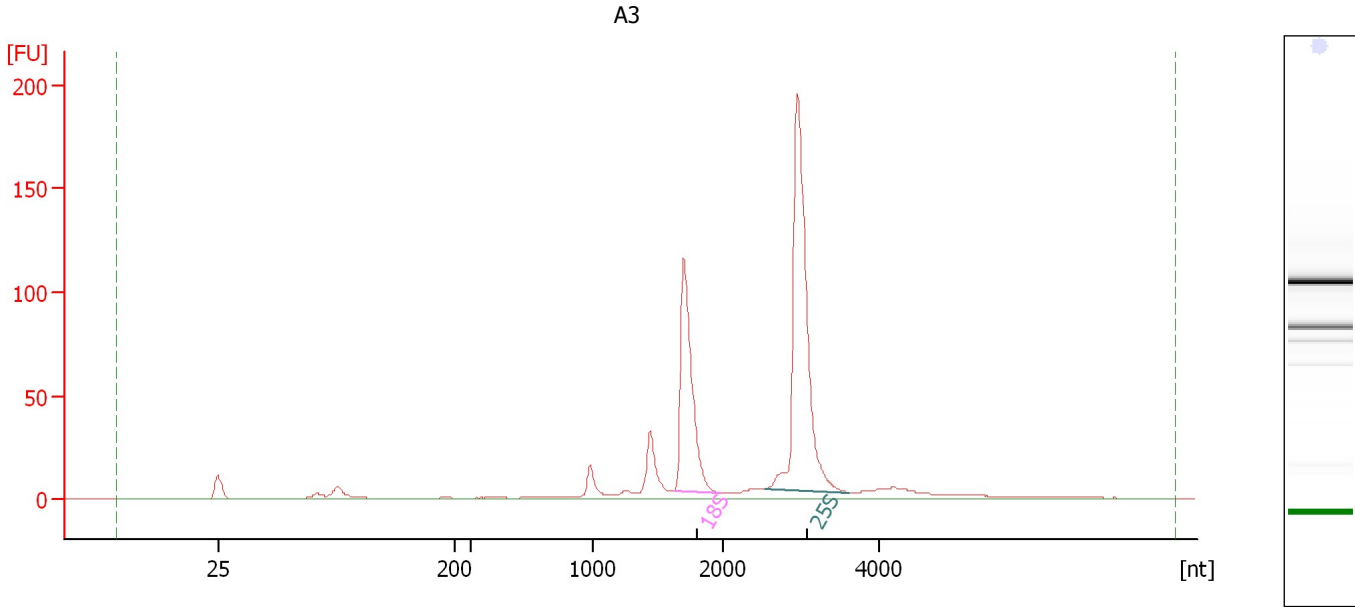
**Fragment table for sample 1 : A1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	2,043	98.9	23.5
25S	2,826	3,637	205.2	48.7

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : A3**

RNA Area: 633.4                      RNA Integrity Number (RIN): 9.4 (B.02.08)  
RNA Concentration: 602 ng/μl              Result Flagging Color:   
rRNA Ratio [25s / 18s]: 1.8              Result Flagging Label: RIN: 9.40

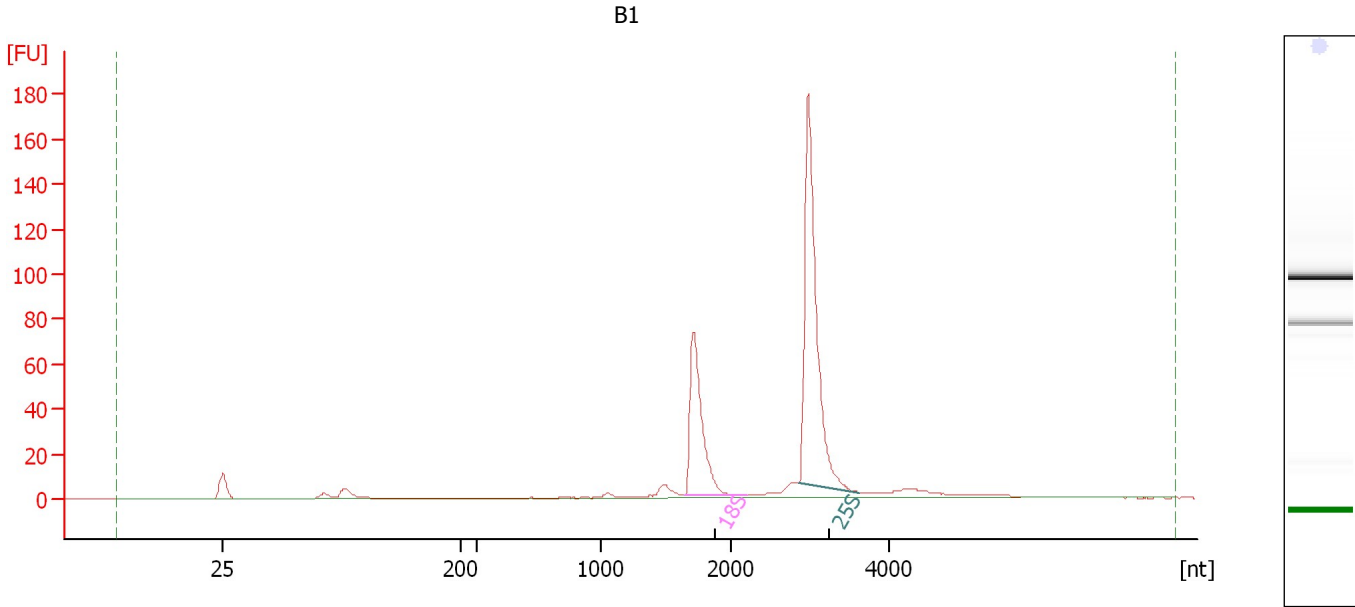
**Fragment table for sample 2 : A3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,631	1,994	152.2	24.0
25S	2,534	3,622	271.5	42.9

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : B1**

RNA Area: 425.2                      RNA Integrity Number (RIN): 9.5 (B.02.08)  
RNA Concentration: 404 ng/μl              Result Flagging Color:   
rRNA Ratio [25s / 18s]: 2.1              Result Flagging Label: RIN: 9.50

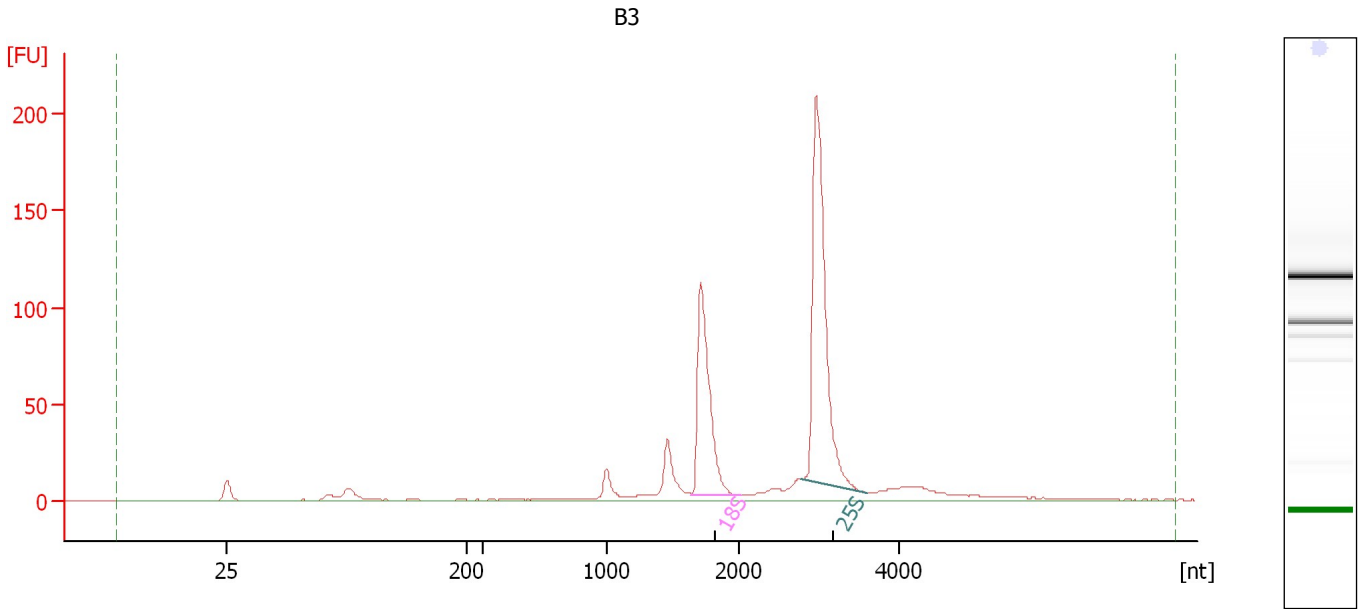
**Fragment table for sample 3 : B1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	2,207	97.2	22.9
25S	2,868	3,624	207.8	48.9

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : B3**

RNA Area: 657.3                      RNA Integrity Number (RIN): 9.3 (B.02.08)  
RNA Concentration: 625 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 1.7                      Result Flagging Label: RIN: 9.30

**Fragment table for sample 4 : B3**

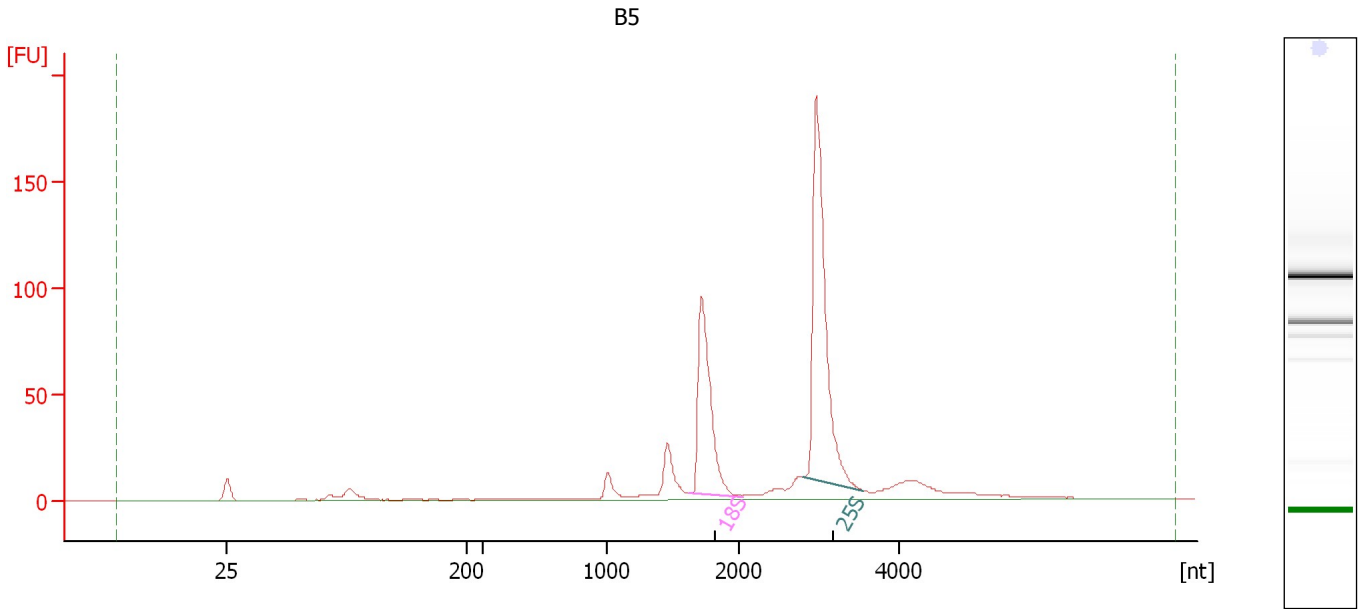
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,639	2,019	149.7	22.8
25S	2,782	3,599	253.9	38.6



Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : B5**

RNA Area: 594.0                      RNA Integrity Number (RIN): 9.2 (B.02.08)  
RNA Concentration: 565 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 1.7                      Result Flagging Label: RIN: 9.20

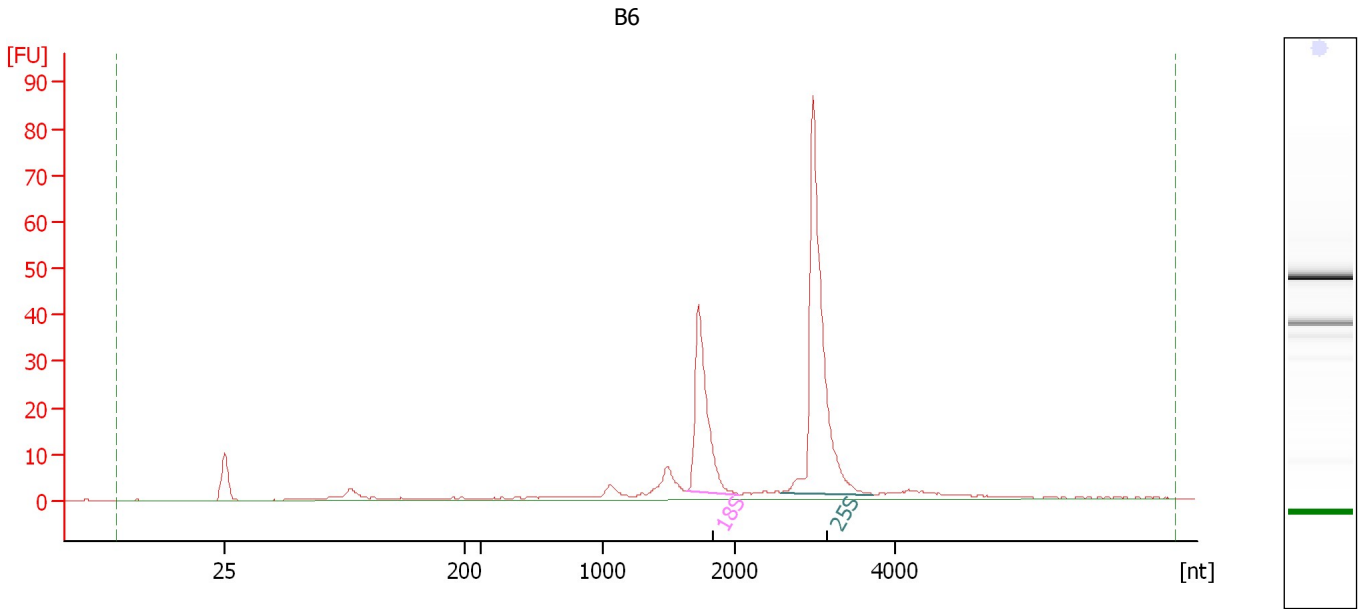
**Fragment table for sample 5 : B5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,623	2,033	133.1	22.4
25S	2,796	3,558	224.9	37.9

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : B6**

RNA Area:	245.0	RNA Integrity Number (RIN):	9.1 (B.02.08)
RNA Concentration:	233 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [25s / 18s]:	2.0	Result Flagging Label:	RIN: 9.10

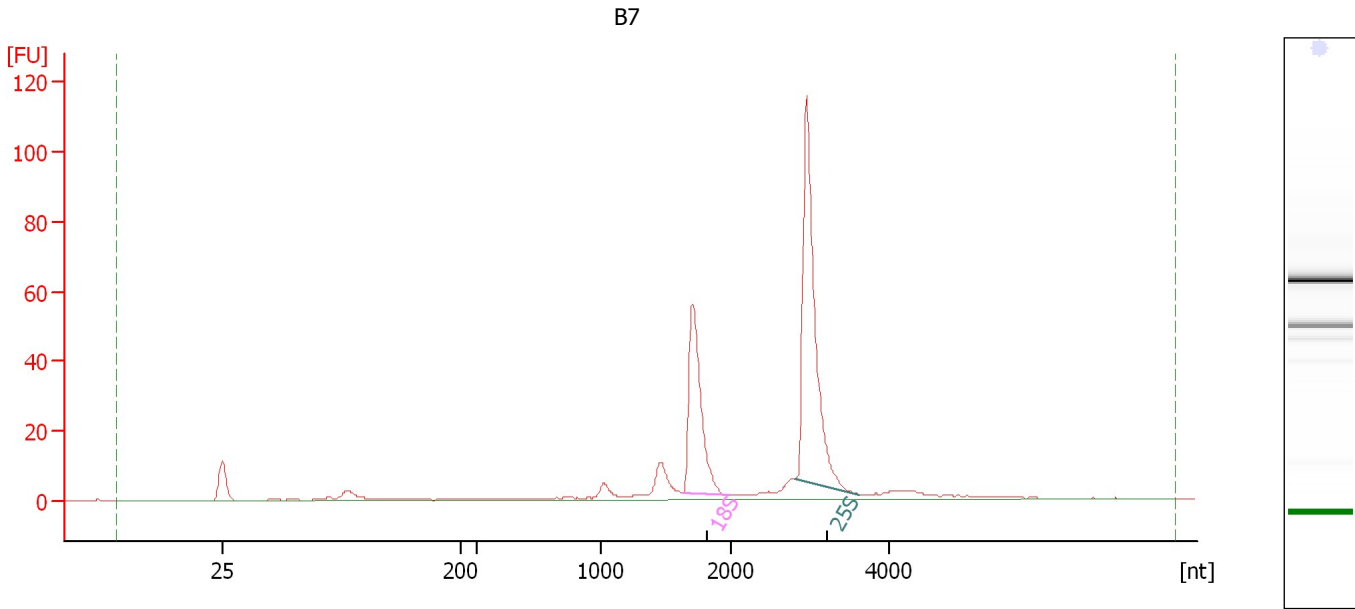
**Fragment table for sample 6 : B6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,629	2,059	55.3	22.6
25S	2,583	3,739	108.7	44.4

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : B7**

RNA Area: 313.3                      RNA Integrity Number (RIN): 9.2 (B.02.08)  
RNA Concentration: 298 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 1.8                      Result Flagging Label: RIN: 9.20

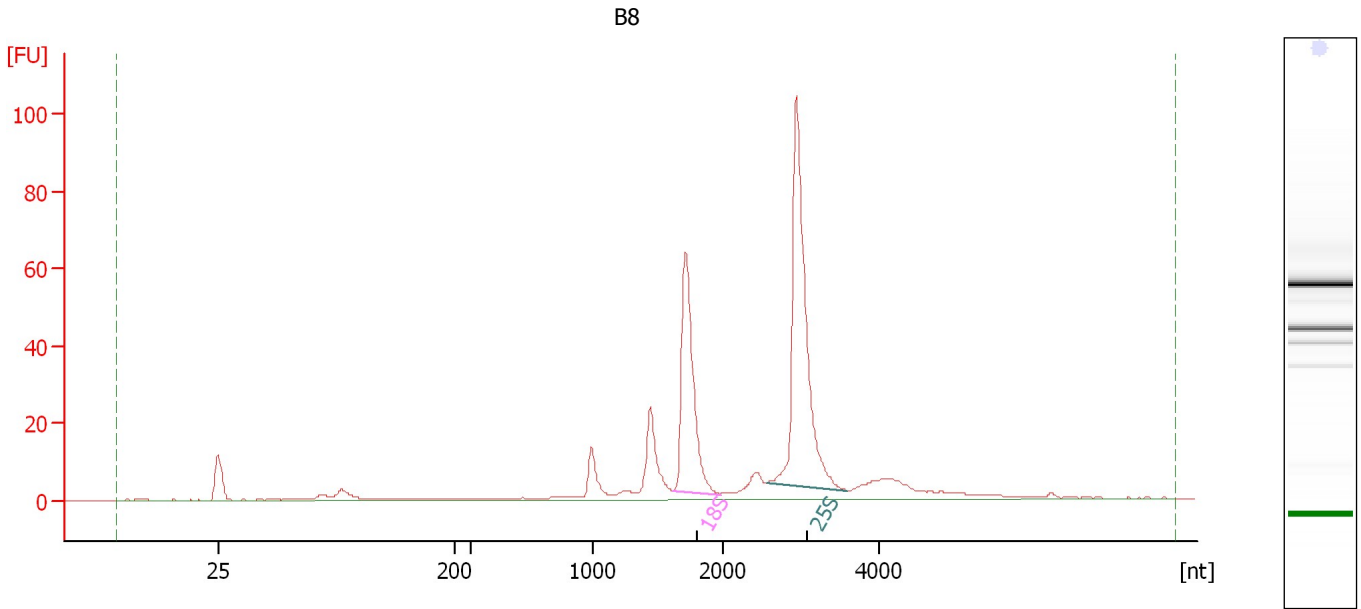
**Fragment table for sample 7 : B7**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,627	2,005	74.5	23.8
25S	2,814	3,610	132.0	42.1

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : B8**

RNA Area:	379.3	RNA Integrity Number (RIN):	9.1 (B.02.08)
RNA Concentration:	361 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [25s / 18s]:	1.6	Result Flagging Label:	RIN: 9.10

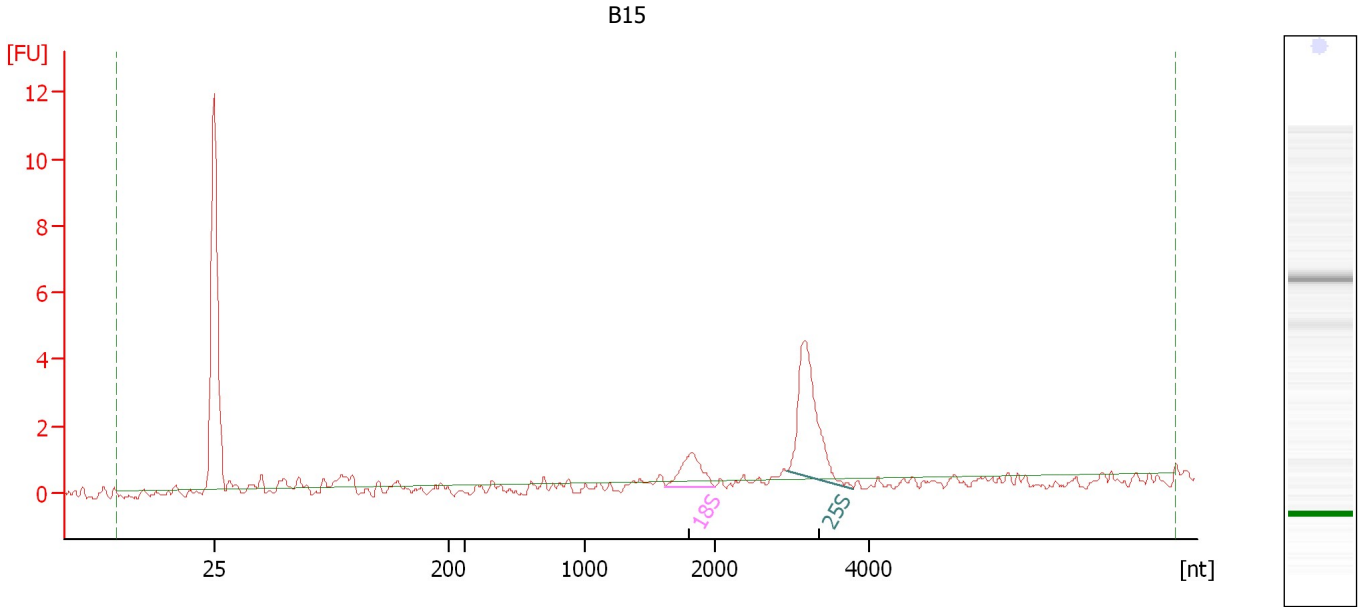
**Fragment table for sample 8 : B8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,615	1,985	85.3	22.5
25S	2,575	3,581	140.0	36.9

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : B15**

RNA Area:	12.8	RNA Integrity Number (RIN):	8.3 (B.02.08)
RNA Concentration:	12 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [25s / 18s]:	3.2	Result Flagging Label:	RIN: 8.30

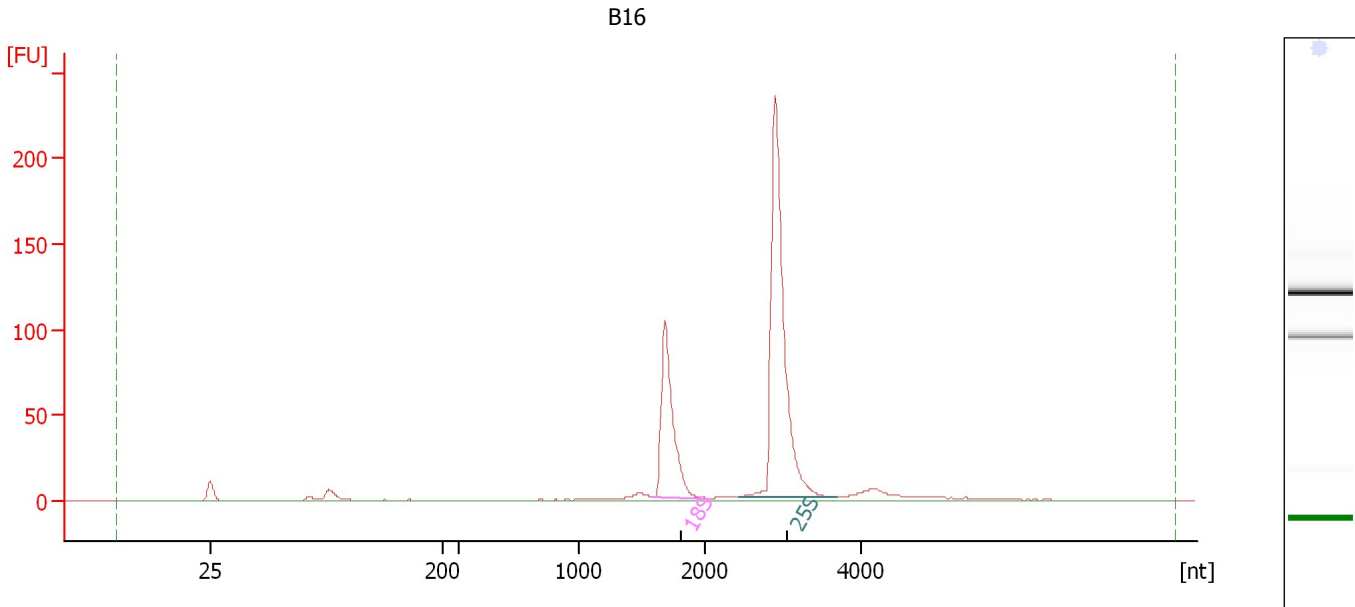
**Fragment table for sample 9 : B15**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,619	2,002	2.4	18.4
25S	2,934	3,785	7.7	59.7

Assay Class: Plant RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
 Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : B16**

RNA Area:	588.7	RNA Integrity Number (RIN):	9.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	560 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [25s / 18s]:	2.3	Result Flagging Label:	RIN: 9.60

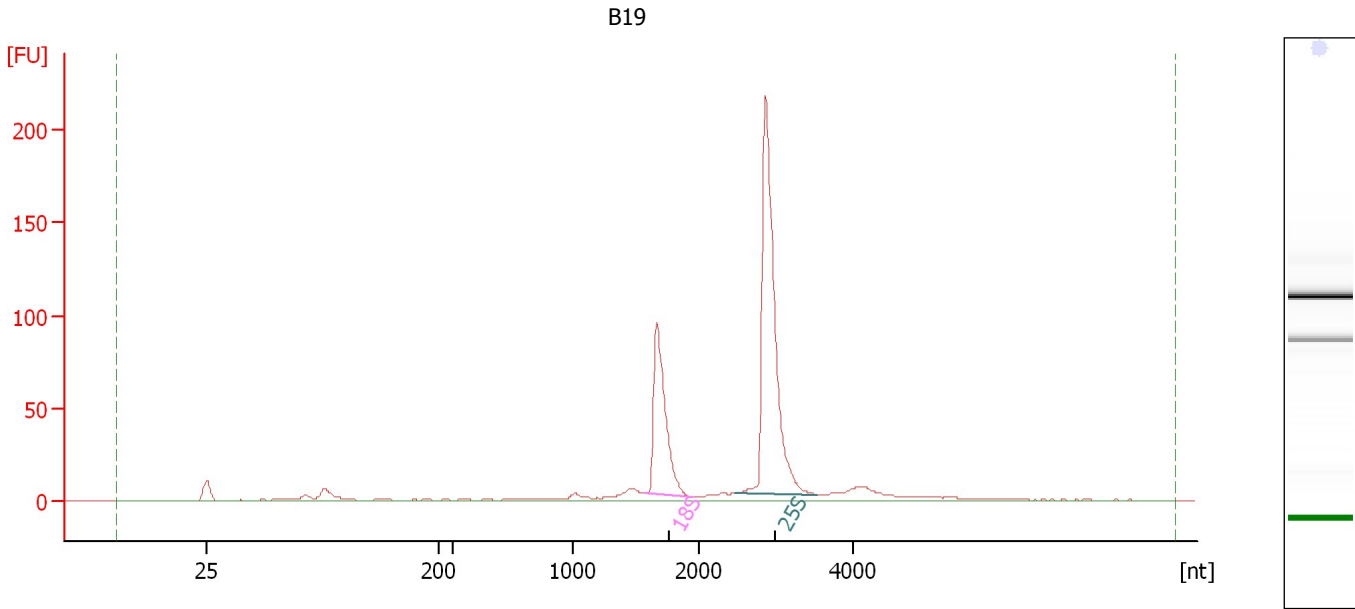
**Fragment table for sample 10 : B16**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,582	2,042	138.4	23.5
25S	2,443	3,688	313.4	53.2

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : B19**

RNA Area: 593.5                      RNA Integrity Number (RIN): 9.4 (B.02.08)  
RNA Concentration: 564 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 2.2                      Result Flagging Label: RIN: 9.40

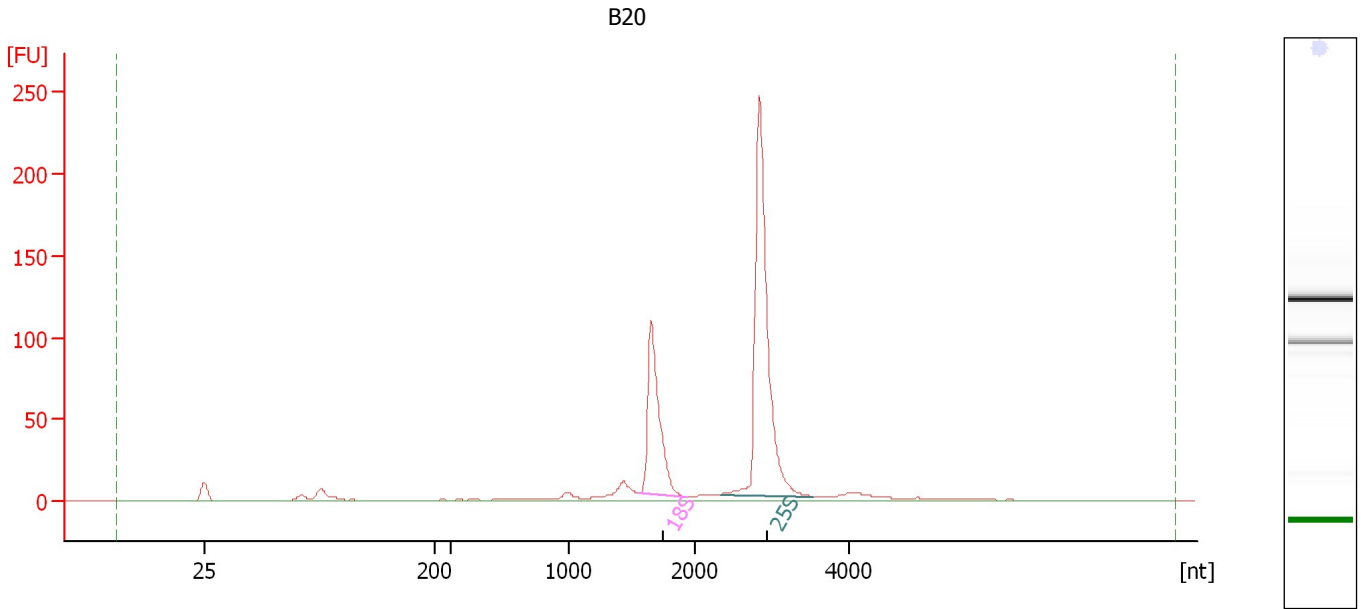
**Fragment table for sample 11 : B19**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,570	1,949	129.5	21.8
25S	2,458	3,544	287.6	48.5

Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : B20**

RNA Area: 648.0                      RNA Integrity Number (RIN): 9.3 (B.02.08)  
RNA Concentration: 616 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 2.2                      Result Flagging Label: RIN: 9.30

**Fragment table for sample 12 : B20**

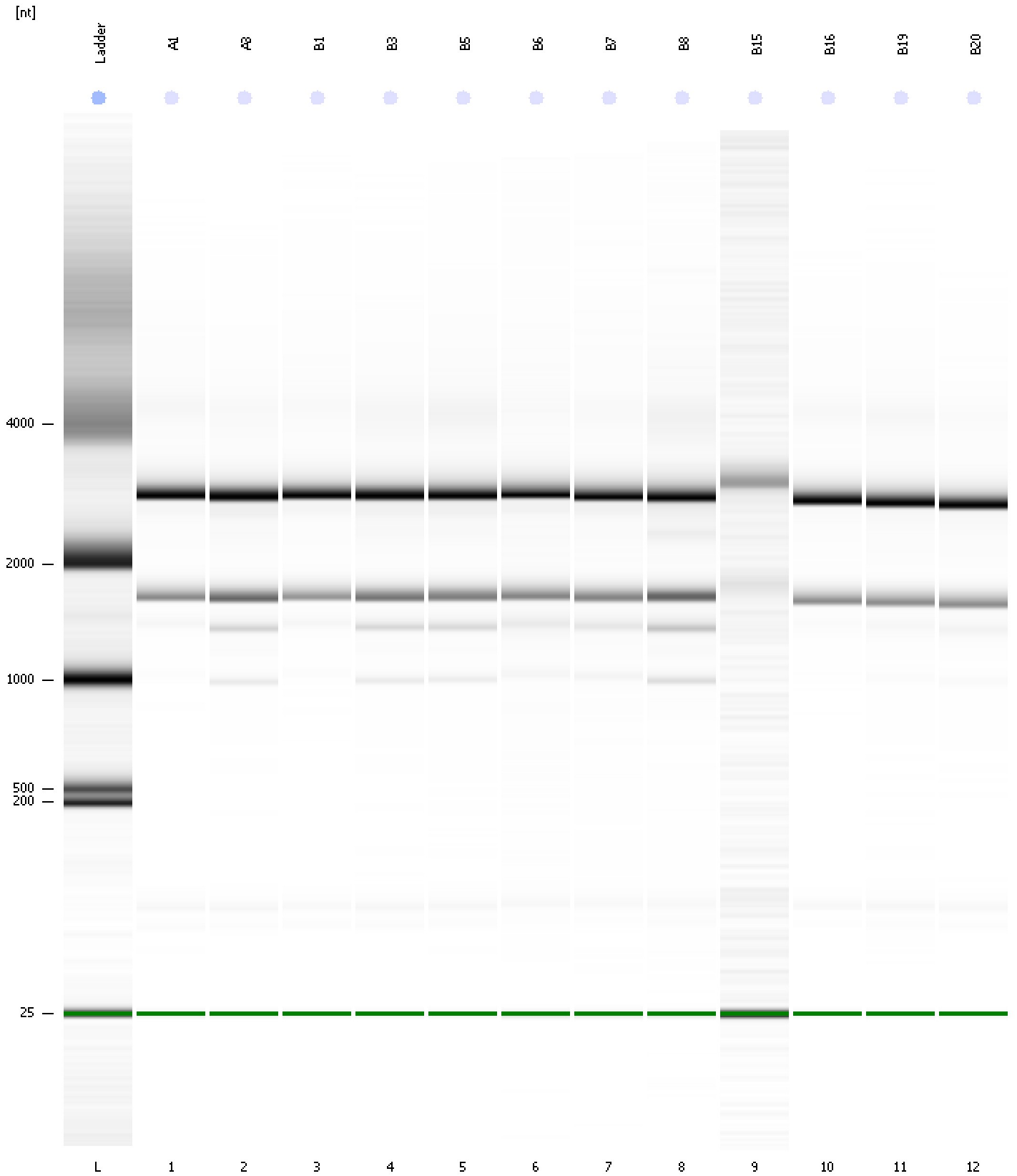
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,551	1,931	146.6	22.6
25S	2,348	3,550	316.3	48.8



Assay Class: Plant RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
Modified: 7/11/2013 10:13:24 AM

**Gel Image**



Assay Class: Plant RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11\_001.xad

Created: 7/11/2013 9:41:56 AM  
 Modified: 7/11/2013 10:13:24 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		7/11/2013 10:05:44 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-11\2013-07-11_001.xad)		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/11/2013 9:42:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1