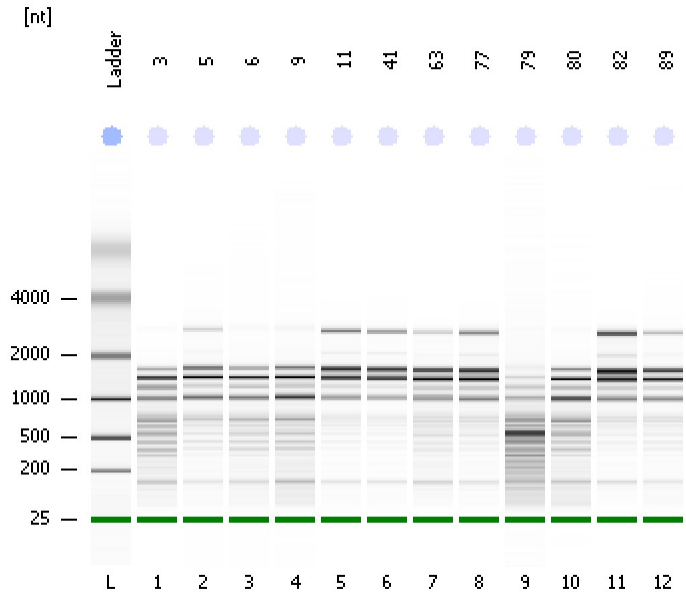


Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

### Electrophoresis File Run Summary



#### Instrument Information:

Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

#### Assay Information:

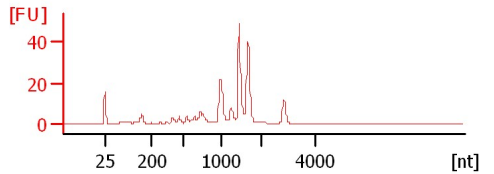
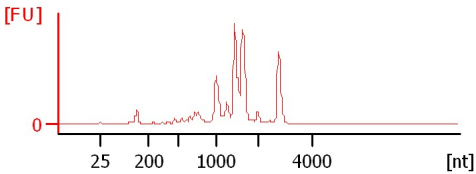
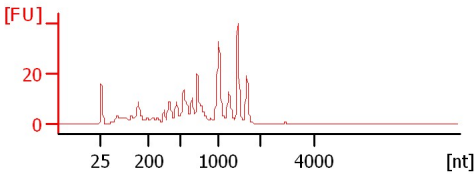
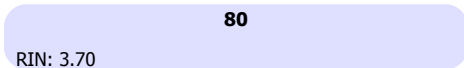
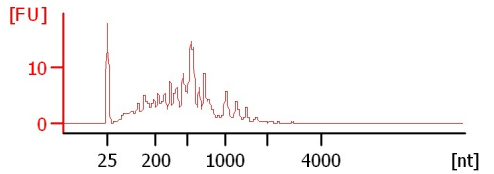
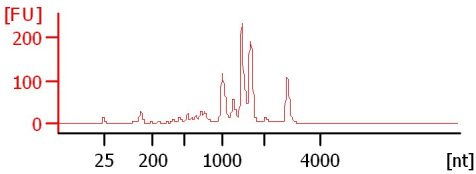
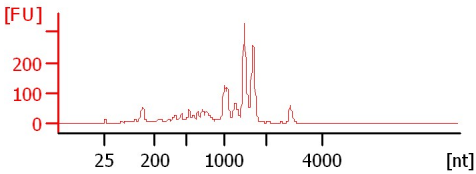
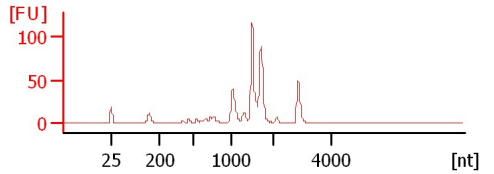
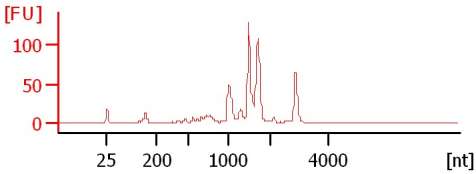
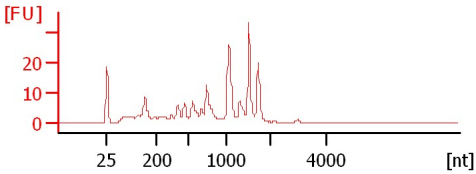
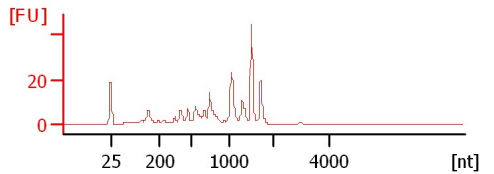
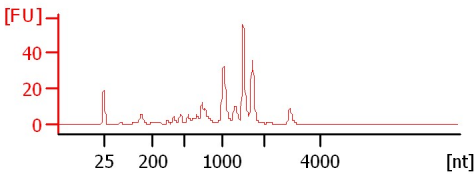
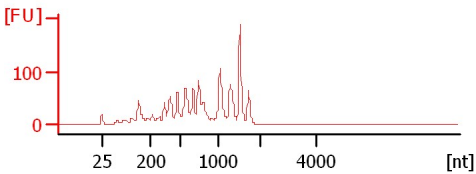
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Plant RNA Nano.xsy

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:



Assay Class: Plant RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
 Modified: 8/29/2019 10:13:26 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
3		✓	RIN: 2.90	
5		✓	RIN: 5.60	
6		✓	RIN: 4.10	
9		✓	RIN: 4.40	
11		✓	RIN: 6.30	
41		✓	RIN: 6.50	
63		✓	RIN: 5.40	
77		✓	RIN: 6.10	
79		✓	RIN: 2.60	
80		✓	RIN: 3.70	
82		✓	RIN: 6.30	
89		✓	RIN:6	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 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

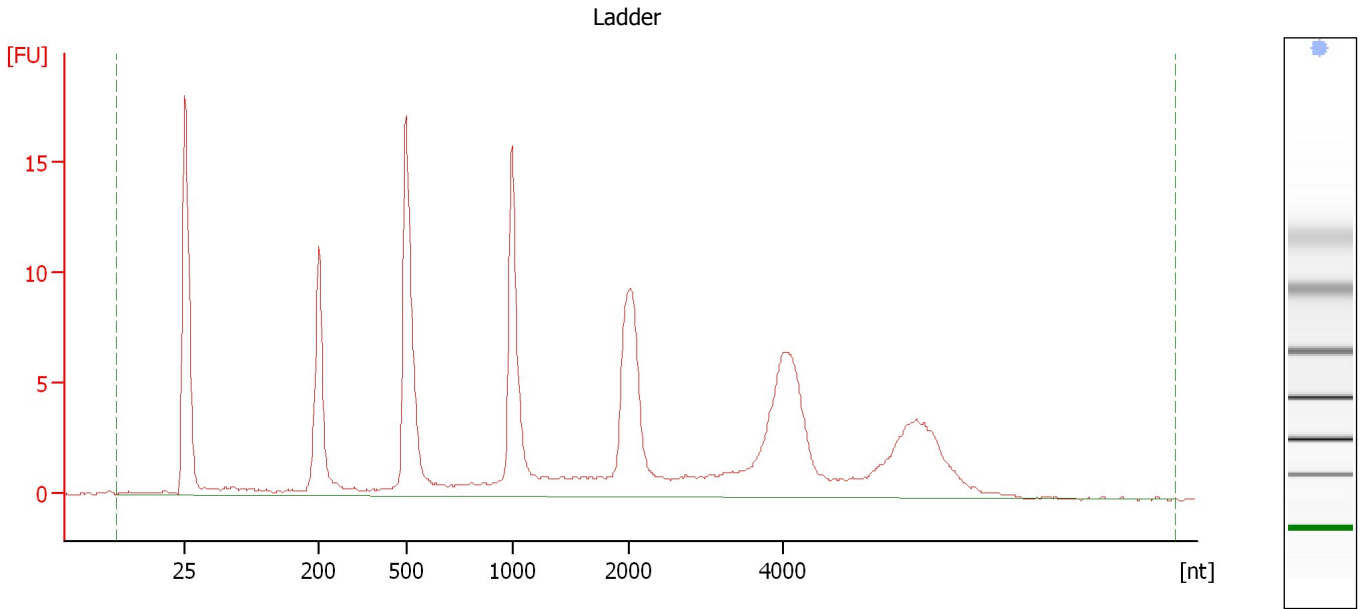
### Ladder

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

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary**



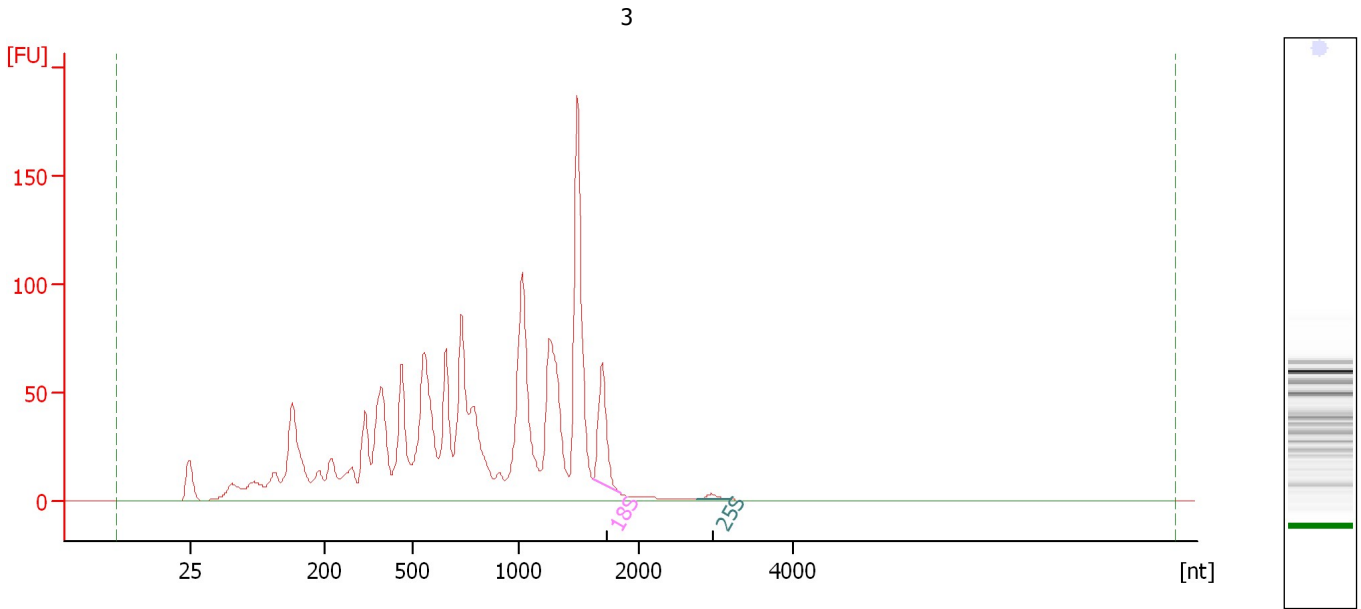
**Overall Results for Ladder**

RNA Area:	159.0	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:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 3**

RNA Area: 1,577.1                      RNA Integrity Number (RIN): 2.9 (B.02.08)  
RNA Concentration: 1,487 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.1                      Result Flagging Label: RIN: 2.90

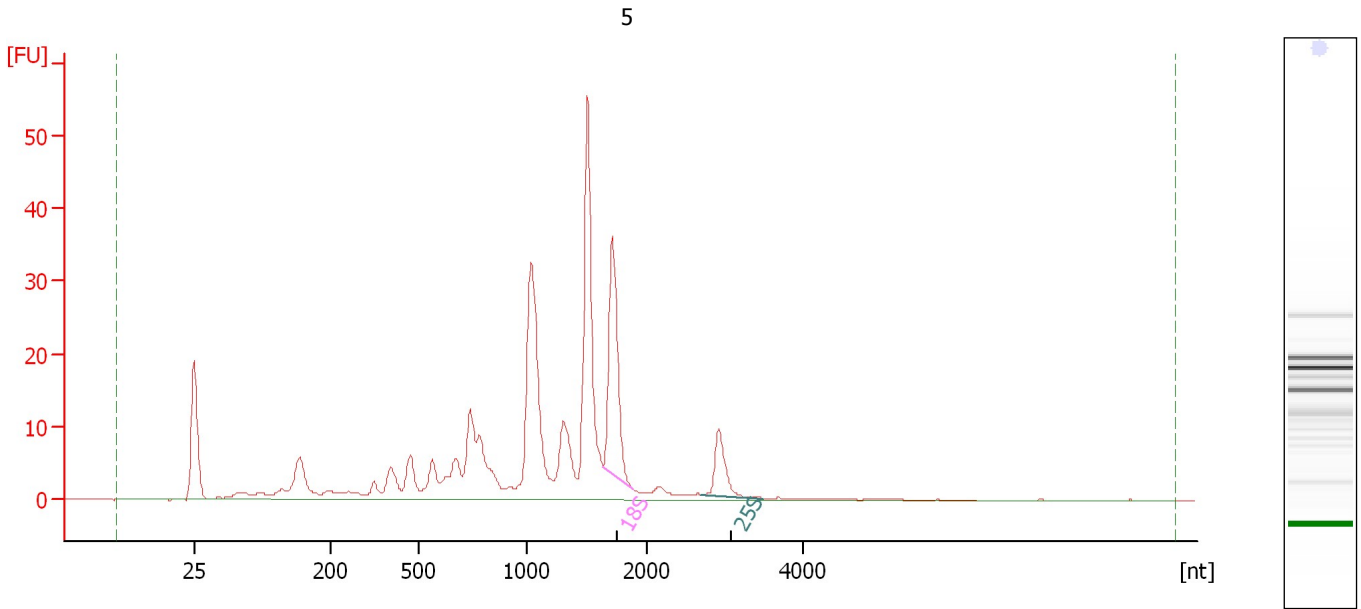
**Fragment table for sample 1 : 3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,624	1,849	56.1	3.6
25S	2,761	3,202	3.0	0.2

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 5**

RNA Area:	304.3	RNA Integrity Number (RIN):	5.6 (B.02.08)
RNA Concentration:	287 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]:	0.3	Result Flagging Label:	RIN: 5.60

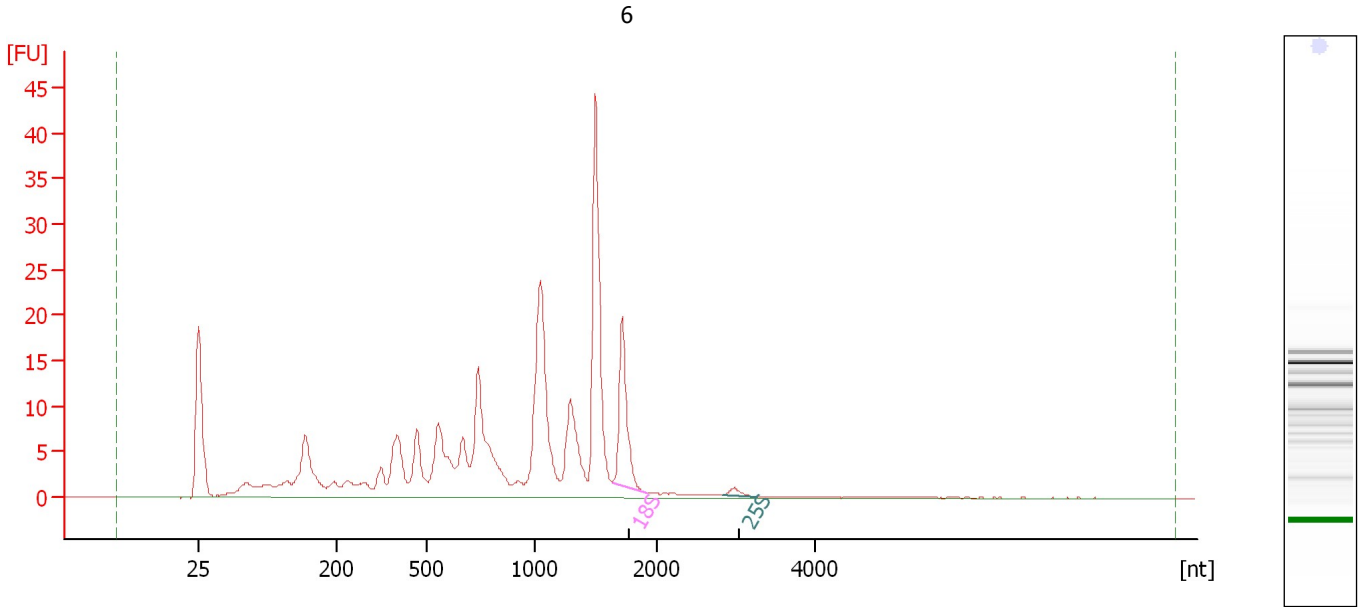
**Fragment table for sample 2 : 5**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,639	1,889	35.1	11.5
25S	2,705	3,483	10.6	3.5

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 6**

RNA Area:	254.0	RNA Integrity Number (RIN):	4.1 (B.02.08)
RNA Concentration:	240 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]:	0.1	Result Flagging Label:	RIN: 4.10

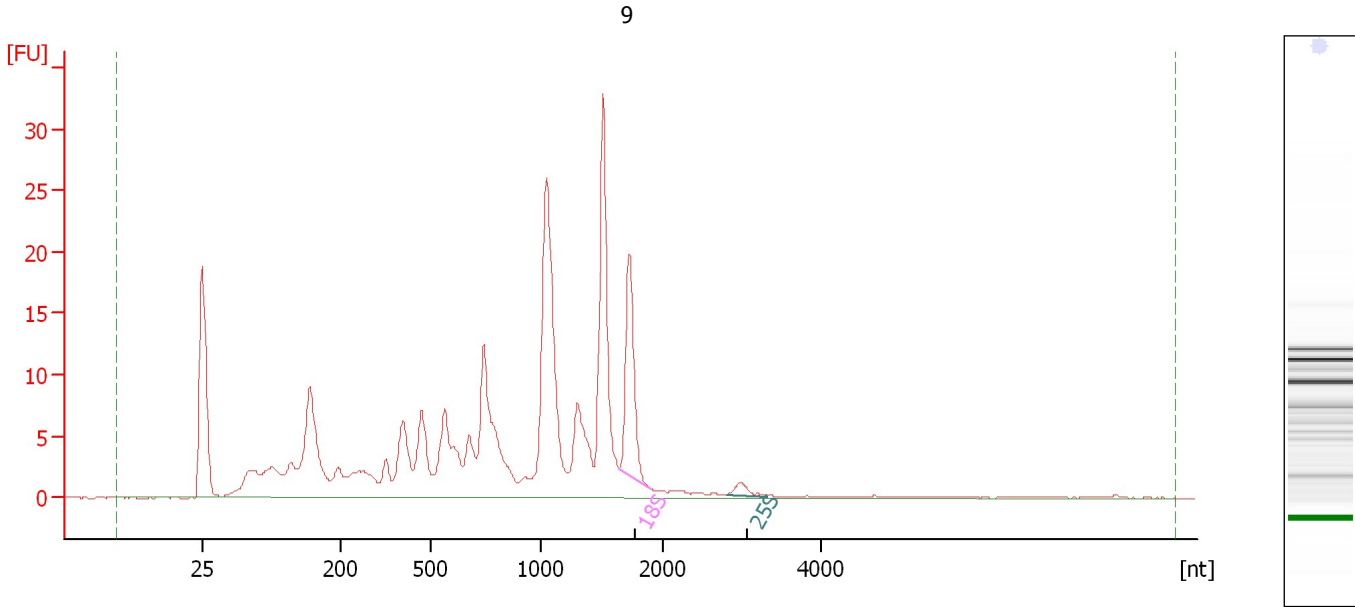
**Fragment table for sample 3 : 6**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,638	1,912	17.5	6.9
25S	2,838	3,270	1.0	0.4

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 9**

RNA Area: 257.0                      RNA Integrity Number (RIN): 4.4 (B.02.08)  
RNA Concentration: 242 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.1                      Result Flagging Label: RIN: 4.40

**Fragment table for sample 4 : 9**

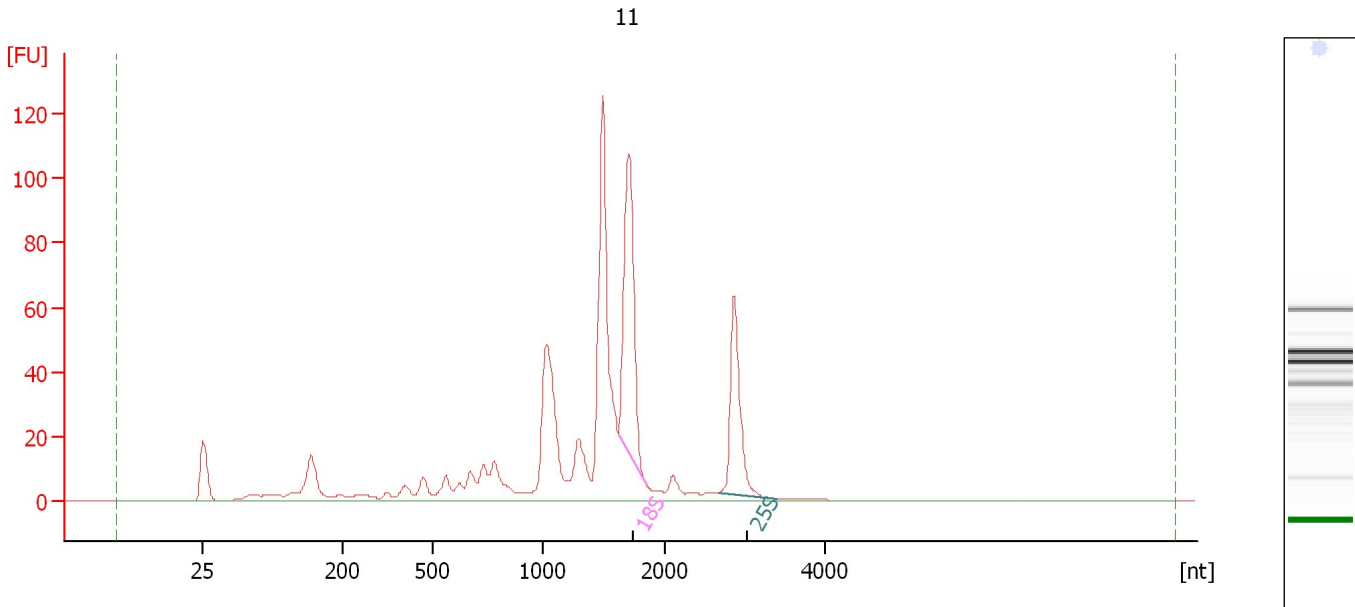
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,642	1,906	17.7	6.9
25S	2,796	3,305	1.4	0.5



Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 11**

RNA Area:	687.3	RNA Integrity Number (RIN):	6.3 (B.02.08)
RNA Concentration:	648 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]:	0.6	Result Flagging Label:	RIN: 6.30

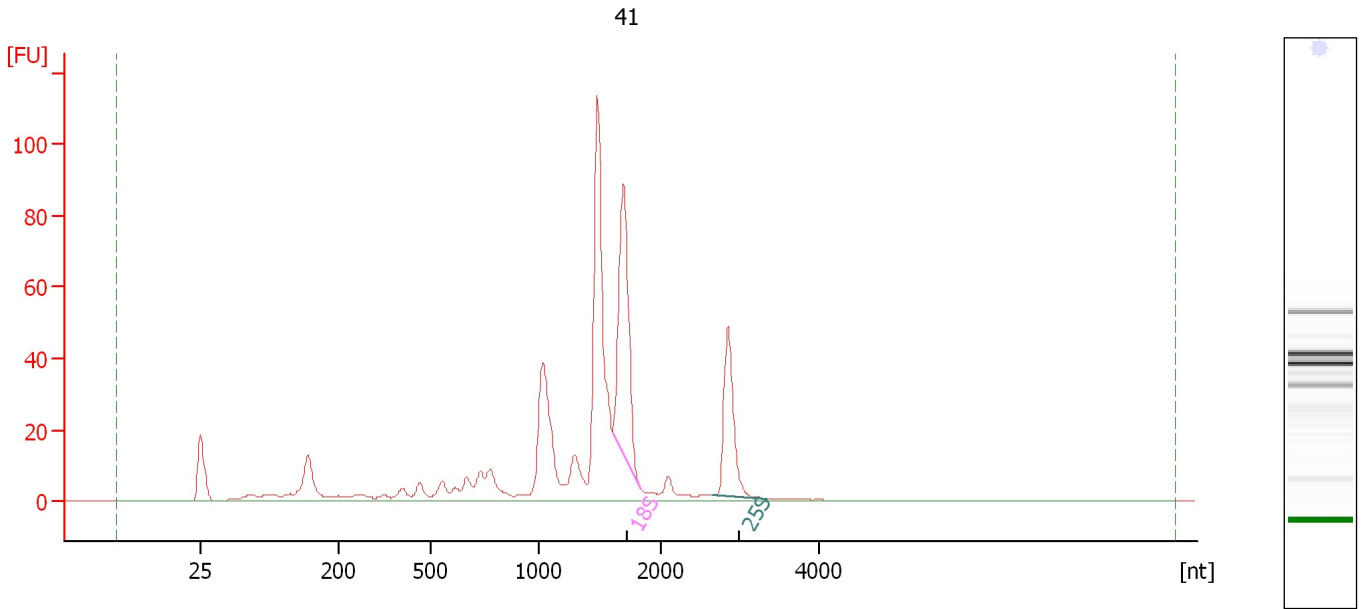
**Fragment table for sample 5 : 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,618	1,845	112.0	16.3
25S	2,688	3,397	66.9	9.7

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 41**

RNA Area: 545.1                      RNA Integrity Number (RIN): 6.5 (B.02.08)  
RNA Concentration: 514 ng/μl              Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.5              Result Flagging Label: RIN: 6.50

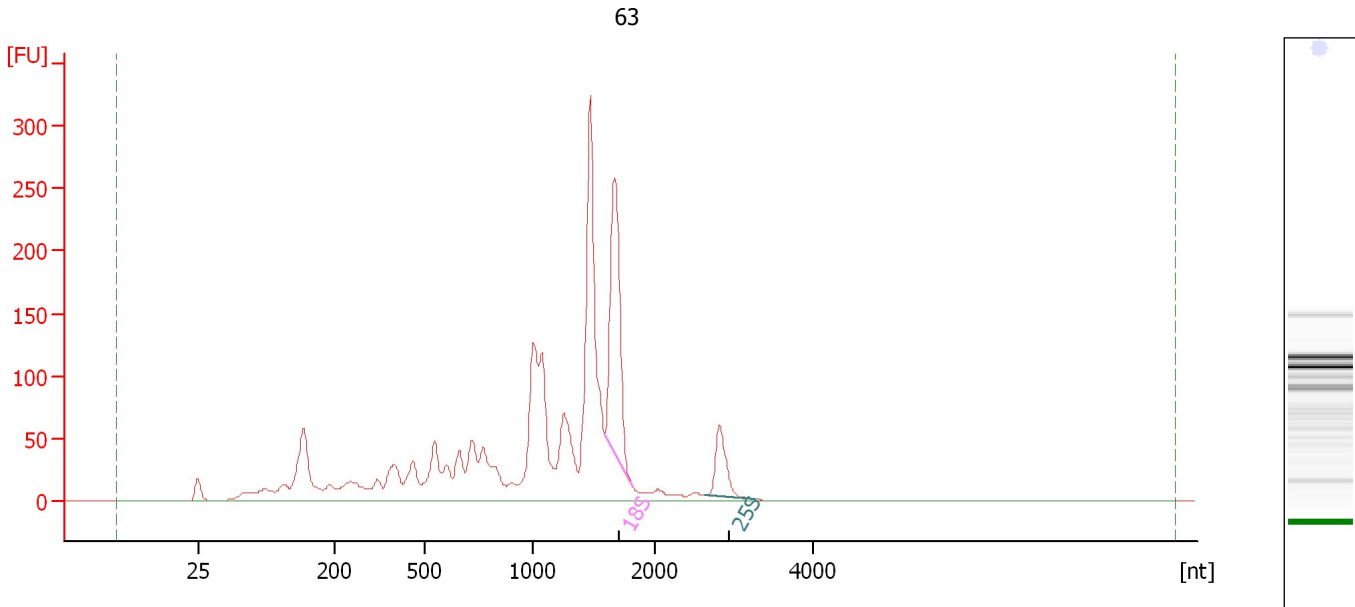
**Fragment table for sample 6 : 41**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,606	1,835	93.3	17.1
25S	2,648	3,334	51.1	9.4

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 63**

RNA Area: 2,109.2                      RNA Integrity Number (RIN): 5.4 (B.02.08)  
RNA Concentration: 1,989 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.3                      Result Flagging Label: RIN: 5.40

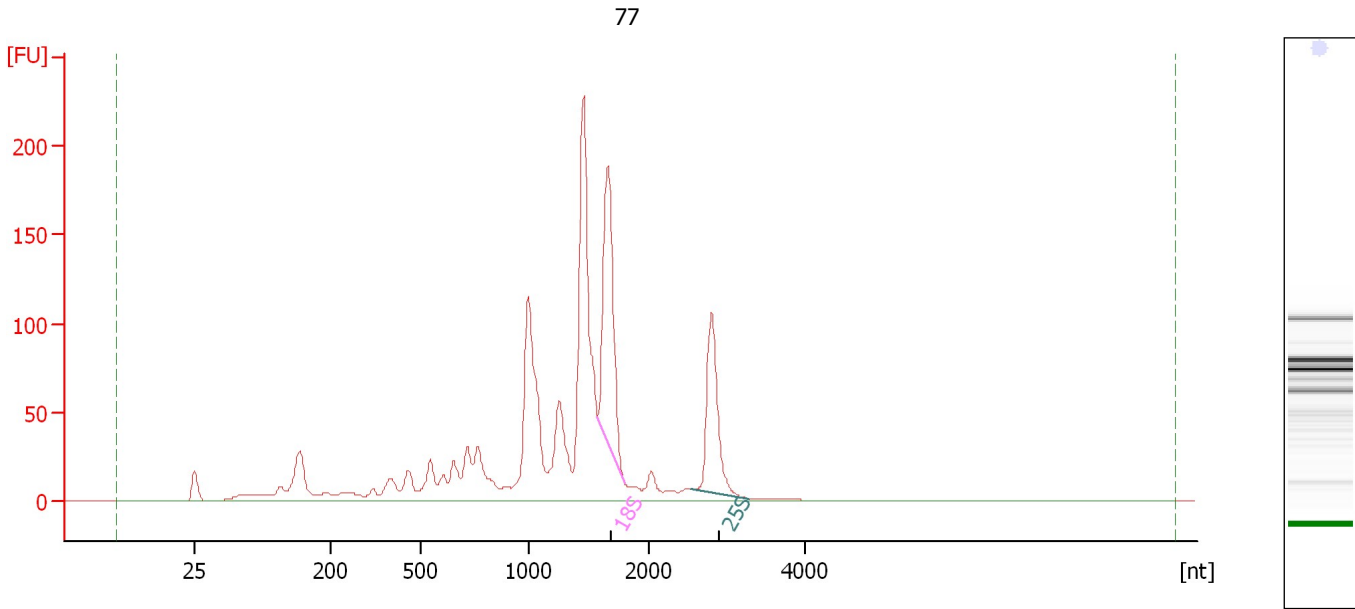
**Fragment table for sample 7 : 63**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,583	1,814	262.6	12.5
25S	2,636	3,271	68.6	3.3

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 77**

RNA Area:	1,478.9	RNA Integrity Number (RIN):	6.1 (B.02.08)
RNA Concentration:	1,395 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]:	0.6	Result Flagging Label:	RIN: 6.10

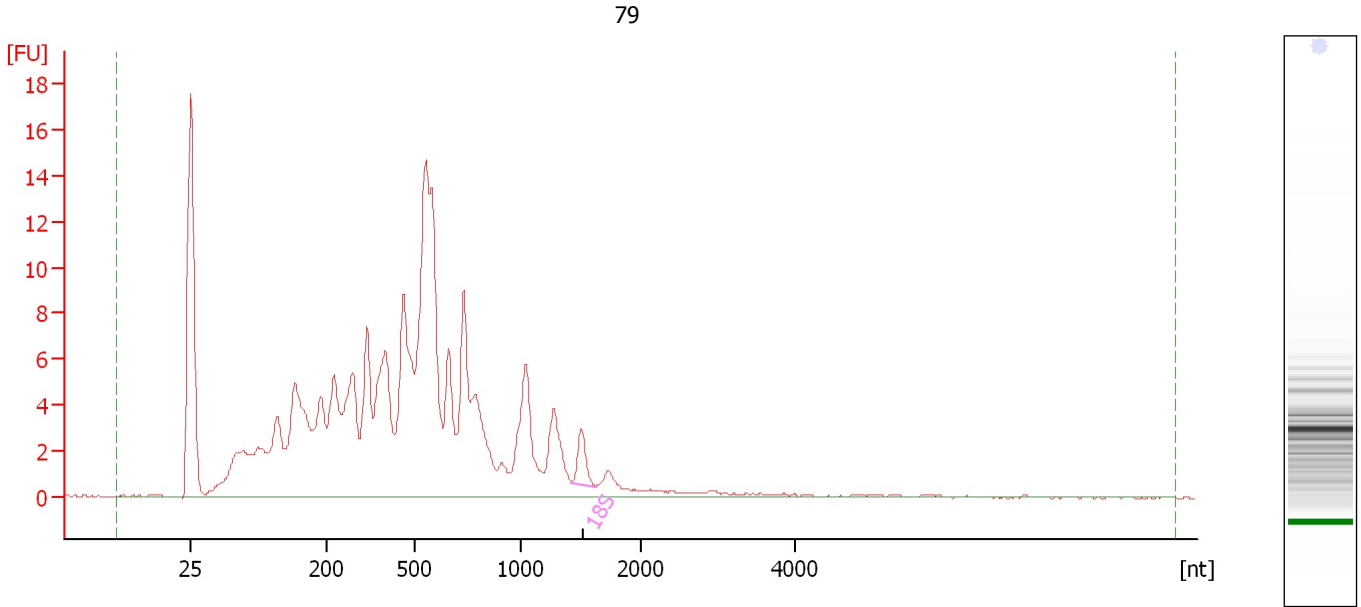
**Fragment table for sample 8 : 77**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,578	1,801	202.3	13.7
25S	2,541	3,276	123.6	8.4

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 79**

RNA Area:	206.1	RNA Integrity Number (RIN):	2.6 (B.02.08)
RNA Concentration:	194 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]:	0.0	Result Flagging Label:	RIN: 2.60

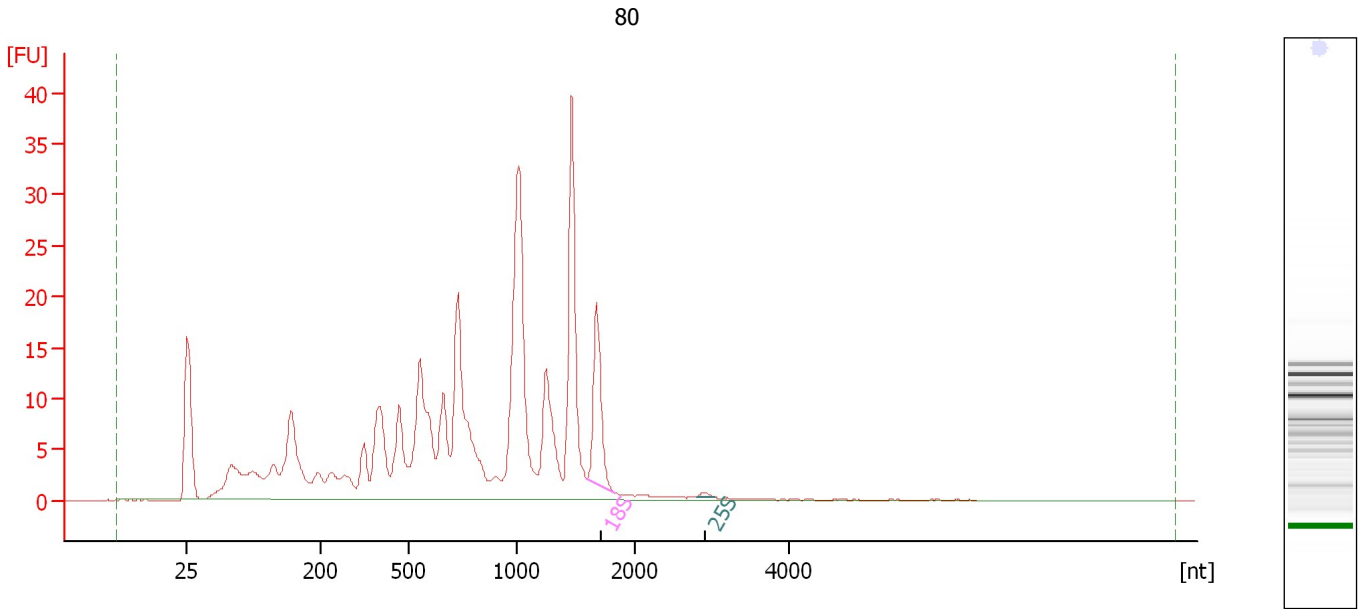
**Fragment table for sample 9 : 79**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,419	1,626	2.3	1.1

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 80**

RNA Area: 323.3                      RNA Integrity Number (RIN): 3.7 (B.02.08)  
RNA Concentration: 305 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.0                      Result Flagging Label: RIN: 3.70

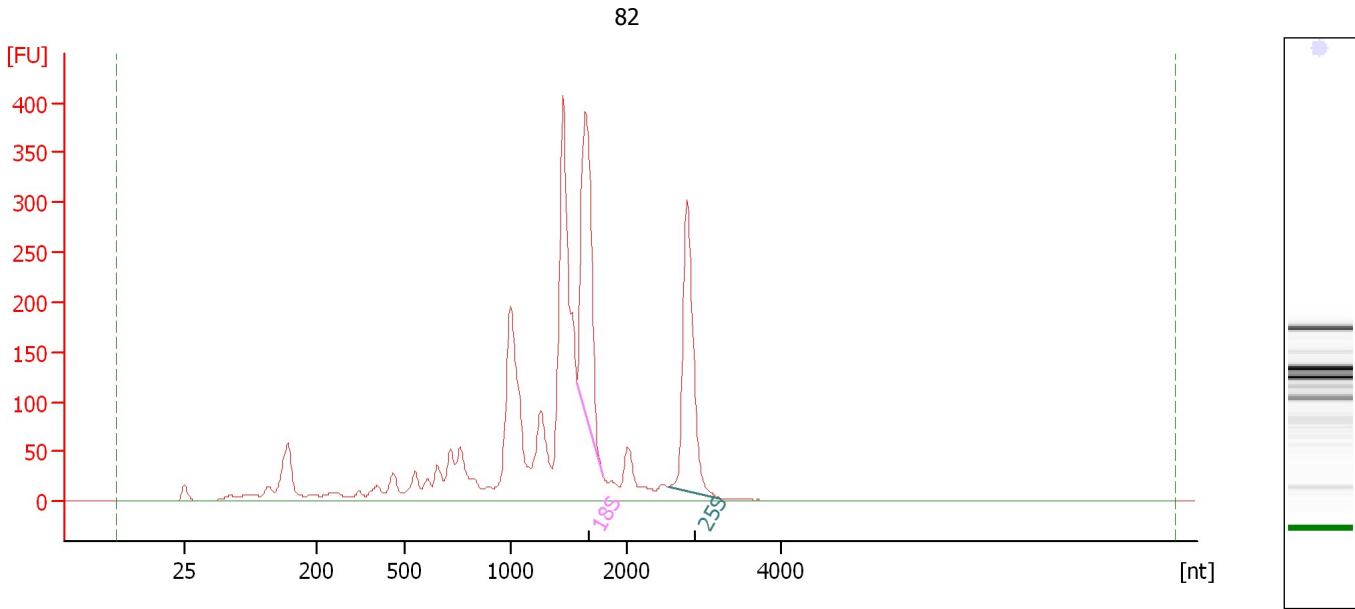
**Fragment table for sample 10 : 80**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,603	1,838	16.5	5.1
25S	2,818	3,053	0.4	0.1

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 82**

RNA Area: 2,925.9                      RNA Integrity Number (RIN): 6.3 (B.02.08)  
RNA Concentration: 2,760 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.9                      Result Flagging Label: RIN: 6.30

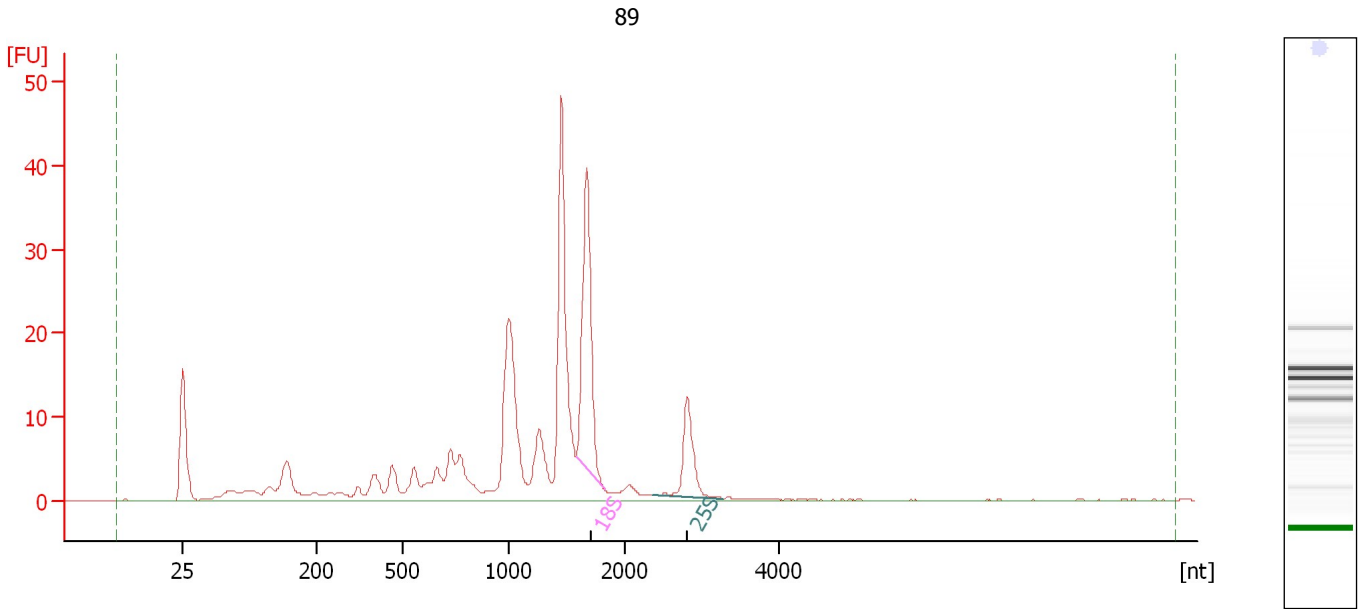
**Fragment table for sample 11 : 82**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,571	1,780	405.2	13.8
25S	2,527	3,223	357.4	12.2

Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 89**

RNA Area: 256.0                      RNA Integrity Number (RIN): 6 (B.02.08)  
RNA Concentration: 241 ng/μl                      Result Flagging Color:   
rRNA Ratio [25s / 18s]: 0.4                      Result Flagging Label: RIN:6

**Fragment table for sample 12 : 89**

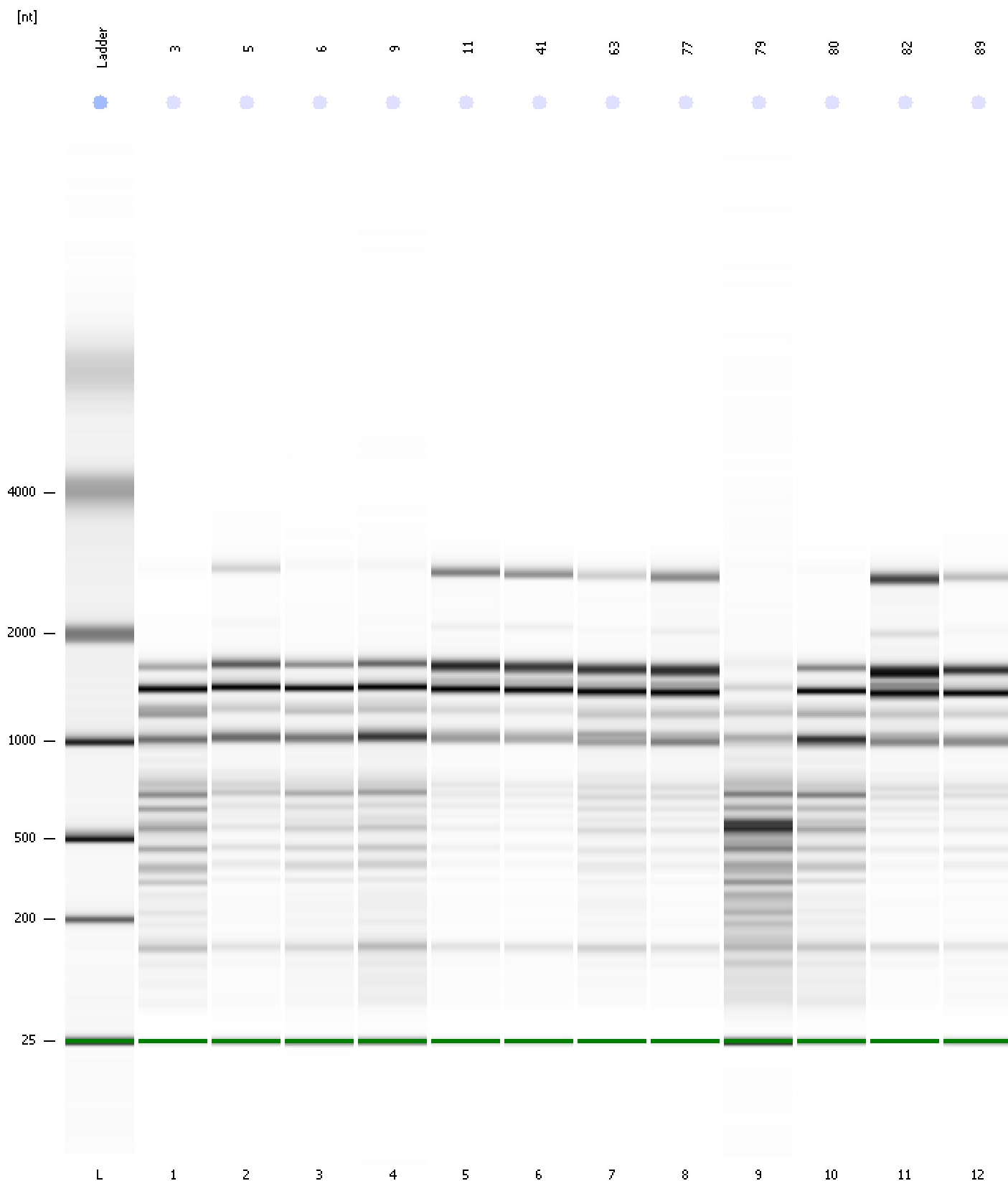
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,578	1,815	39.8	15.5
25S	2,360	3,281	14.0	5.5



Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Gel Image**

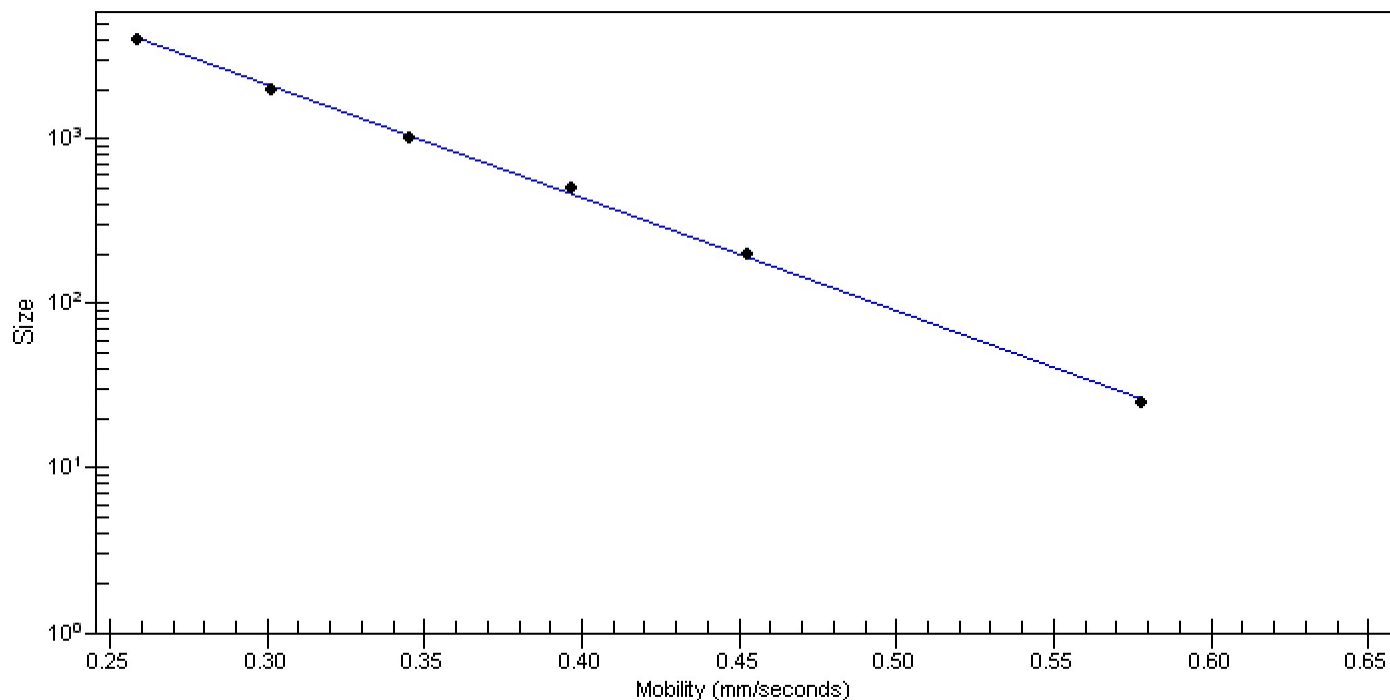


Assay Class: Plant RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
Modified: 8/29/2019 10:13:26 AM

**Curves**

**Standard Curve**



Assay Class: Plant RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-29\2019-08-29\_001.xad

Created: 8/29/2019 9:49:34 AM  
 Modified: 8/29/2019 10:13:26 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		8/29/2019 10:13:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-08-29\2019-08-29_001.xad)		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/29/2019 9:49:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1