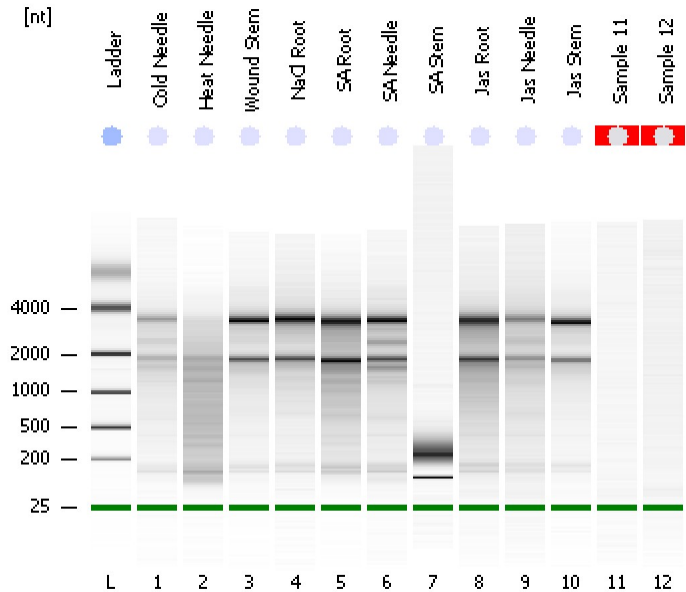


Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
 Modified: 9/10/2014 3:27:26 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\Plant RNA Nano.xsy

Assay Class: Plant RNA Nano

Version: 1.3

Assay Comments: Total RNA Analysis ng sensitivity (Plant)

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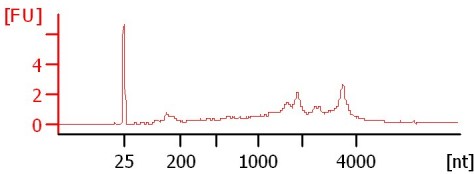
Chip Information:

Chip Lot #:

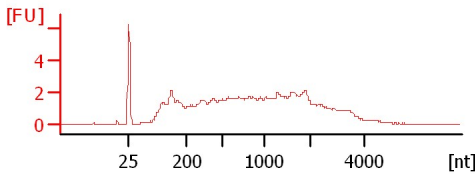
Reagent Kit Lot #:

Chip Comments:

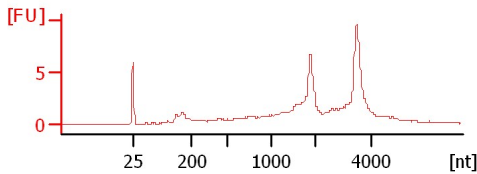
Cold Needle
 RIN: 5.60



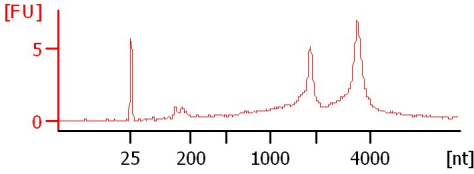
Heat Needle
 RIN: 2.30



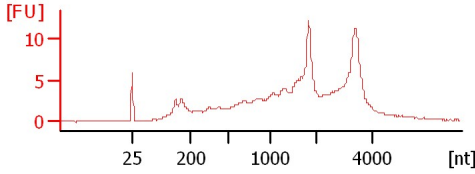
Wound Stem
 RIN: 7.70



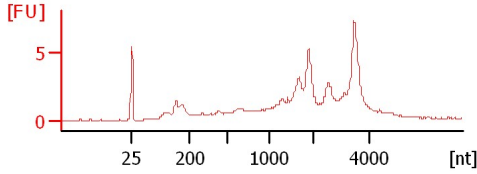
NaCl Root
 RIN: 7.60



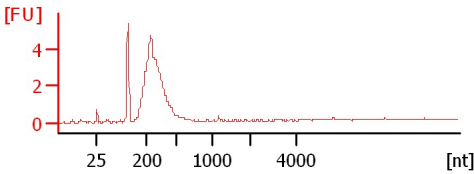
SA Root
 RIN: 6.70



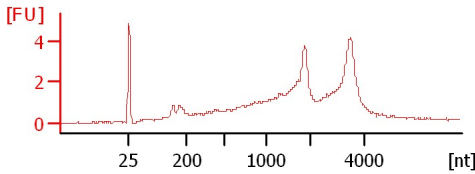
SA Needle
 RIN: 7.20



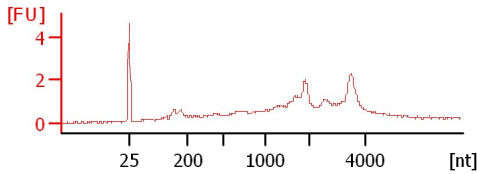
SA Stem
 RIN: 1.30



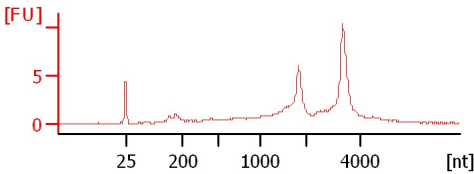
Jas Root
 RIN: 6.30



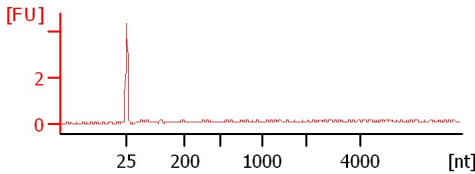
Jas Needle
 RIN: 5.30



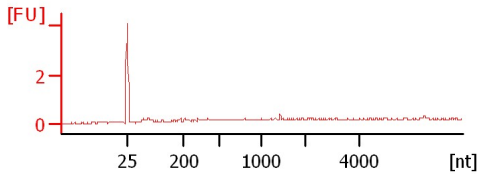
Jas Stem
 RIN: 7.90



Sample 11
 RIN N/A



Sample 12
 RIN N/A



Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
 Modified: 9/10/2014 3:27:26 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
Cold Needle		✓	RIN: 5.60	
Heat Needle		✓	RIN: 2.30	
Wound Stem		✓	RIN: 7.70	
NaCl Root		✓	RIN: 7.60	
SA Root		✓	RIN: 6.70	
SA Needle		✓	RIN: 7.20	
SA Stem		✓	RIN: 1.30	
Jas Root		✓	RIN: 6.30	
Jas Needle		✓	RIN: 5.30	
Jas Stem		✓	RIN: 7.90	
Sample 11		✓	RIN N/A	
Sample 12		✓	RIN N/A	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 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] : 0.2
Area Threshold : 0.1
Width Threshold [s] : 0.2
Baseline Plateau [s] : 6

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

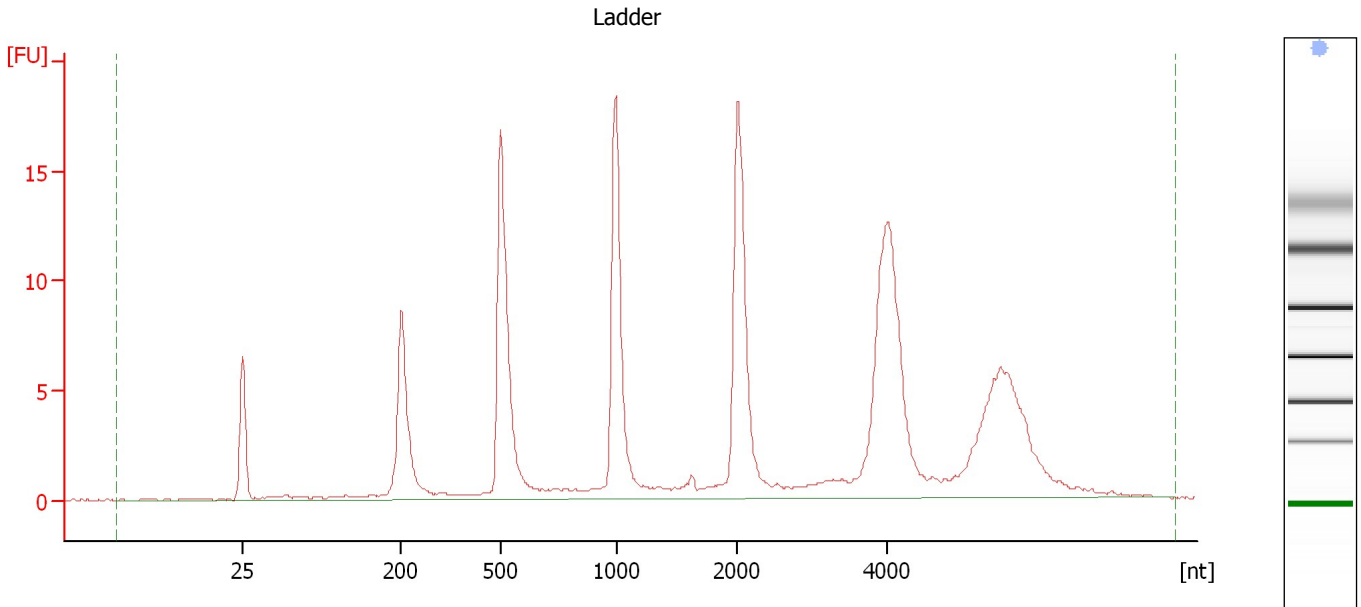
Ladder

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\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary



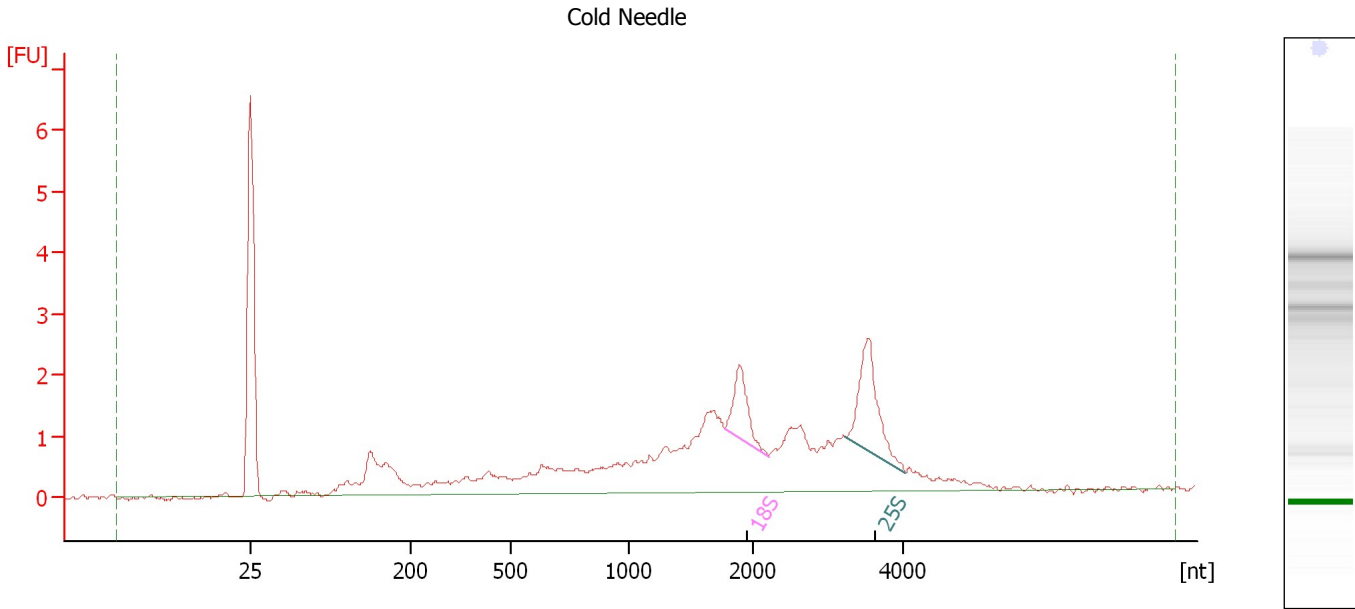
Overall Results for Ladder

RNA Area:	167.1	Result Flagging Color:	
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Cold Needle

RNA Area: 40.1 RNA Integrity Number (RIN): 5.6 (B.02.08)
RNA Concentration: 36 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 1.9 Result Flagging Label: RIN: 5.60

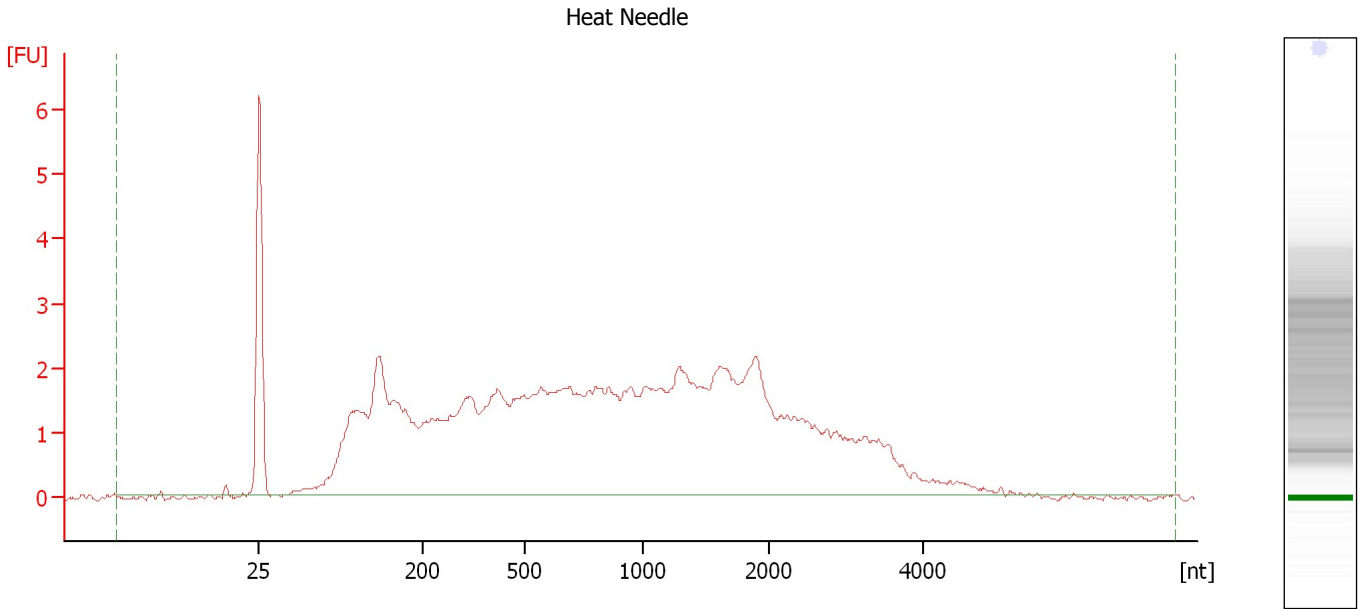
Fragment table for sample 1 : Cold Needle

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,780	2,220	1.8	4.5
25S	3,220	4,023	3.3	8.3

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



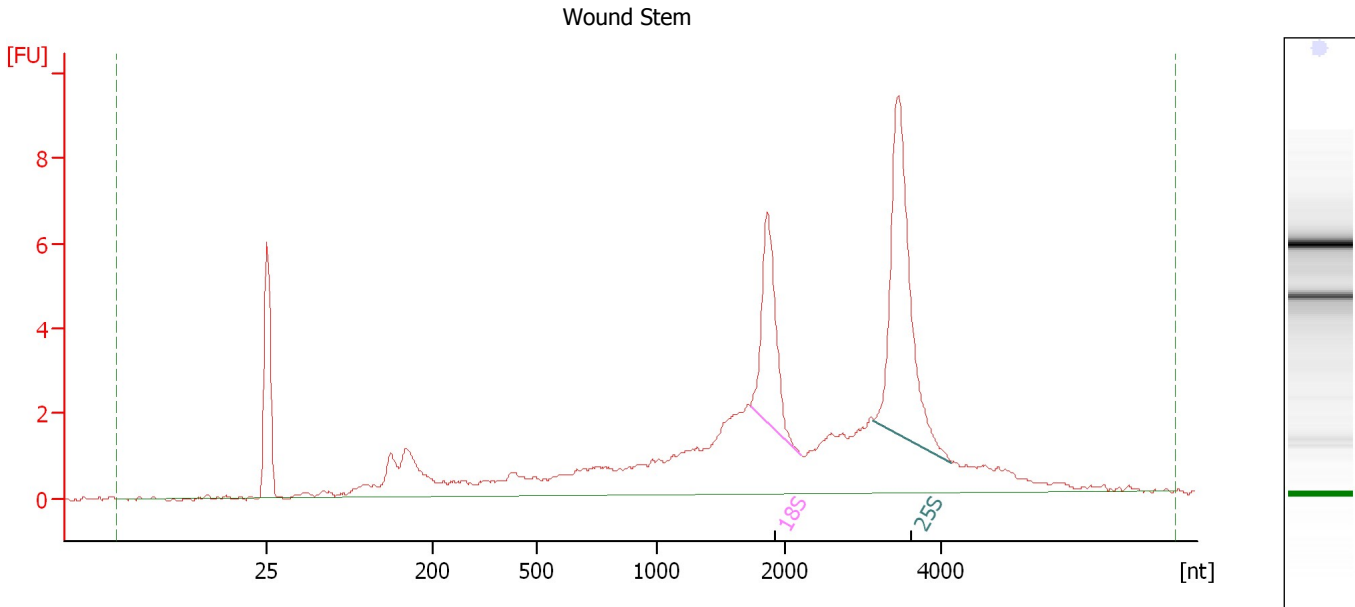
Overall Results for sample 2 : Heat Needle

RNA Area:	92.5	RNA Integrity Number (RIN):	2.3 (B.02.08)
RNA Concentration:	83 ng/μl	Result Flagging Color:	
rRNA Ratio [25s / 18s]:	0.0	Result Flagging Label:	RIN: 2.30

Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
 Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Wound Stem

RNA Area:	82.2	RNA Integrity Number (RIN):	7.7 (B.02.08)
RNA Concentration:	74 ng/μl	Result Flagging Color:	
rRNA Ratio [25s / 18s]:	1.9	Result Flagging Label:	RIN: 7.70

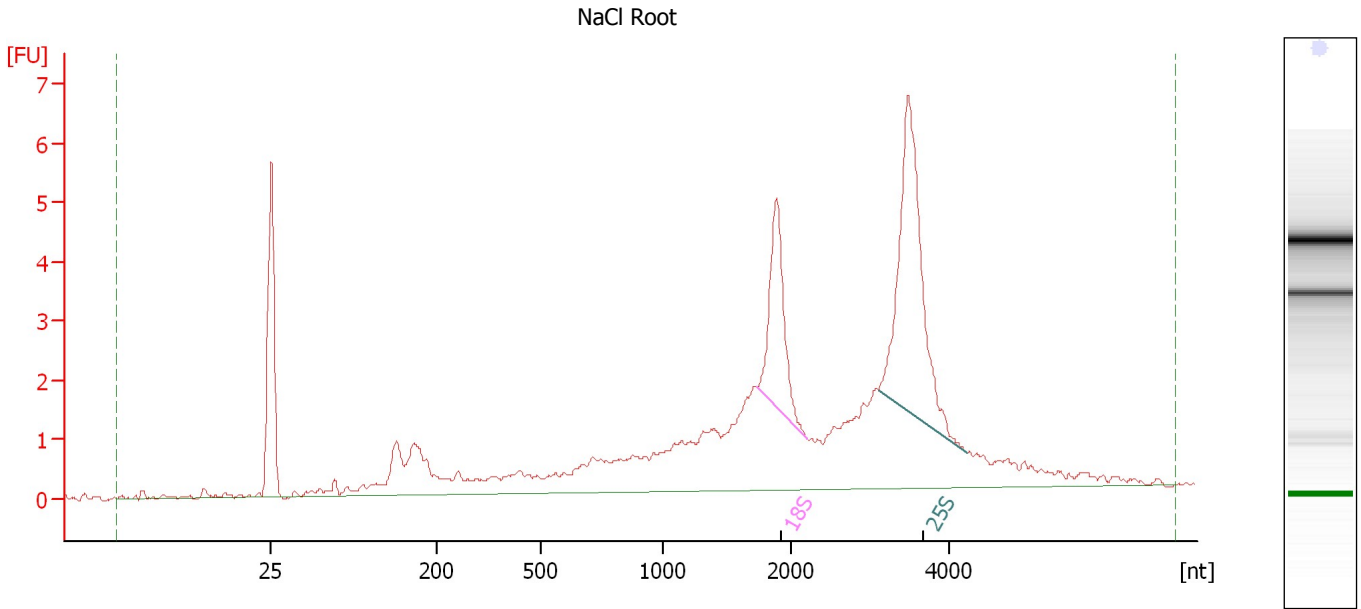
Fragment table for sample 3 : Wound Stem

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,731	2,205	7.4	9.0
25S	3,134	4,132	14.4	17.6

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NaCl Root

RNA Area: 68.0 RNA Integrity Number (RIN): 7.6 (B.02.08)
RNA Concentration: 61 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 2.1 Result Flagging Label: RIN: 7.60

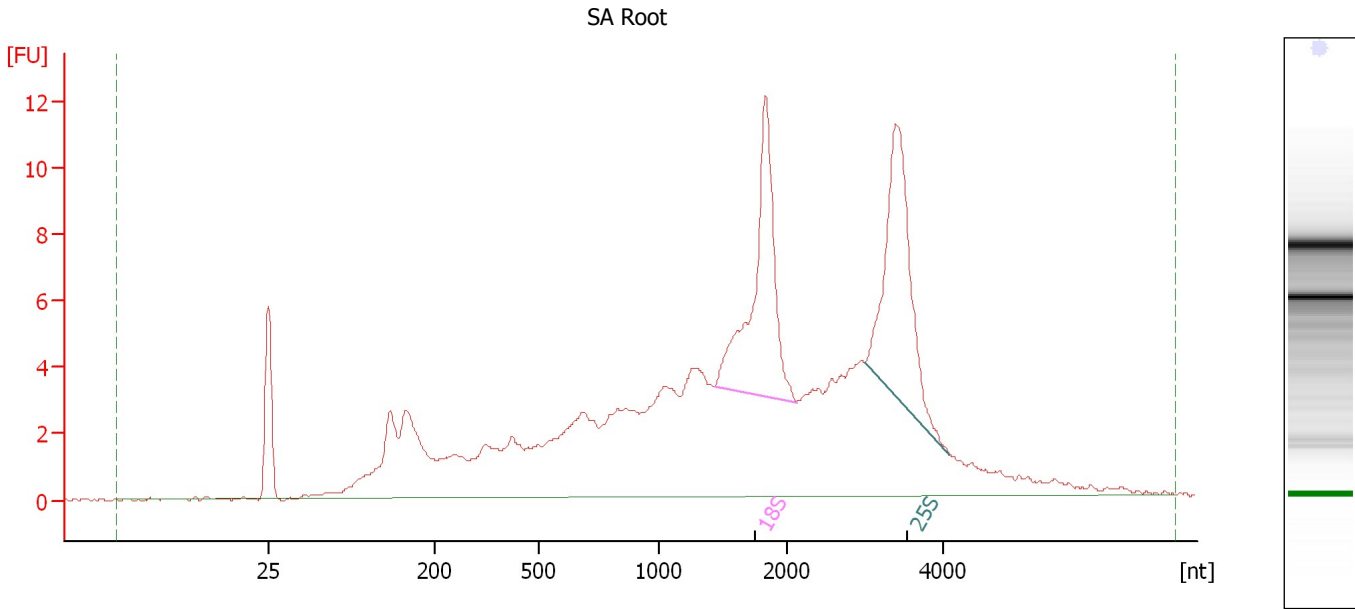
Fragment table for sample 4 : NaCl Root

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,735	2,194	5.3	7.9
25S	3,118	4,232	11.4	16.8

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : SA Root

RNA Area: 198.5 RNA Integrity Number (RIN): 6.7 (B.02.08)
RNA Concentration: 178 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 1.0 Result Flagging Label: RIN: 6.70

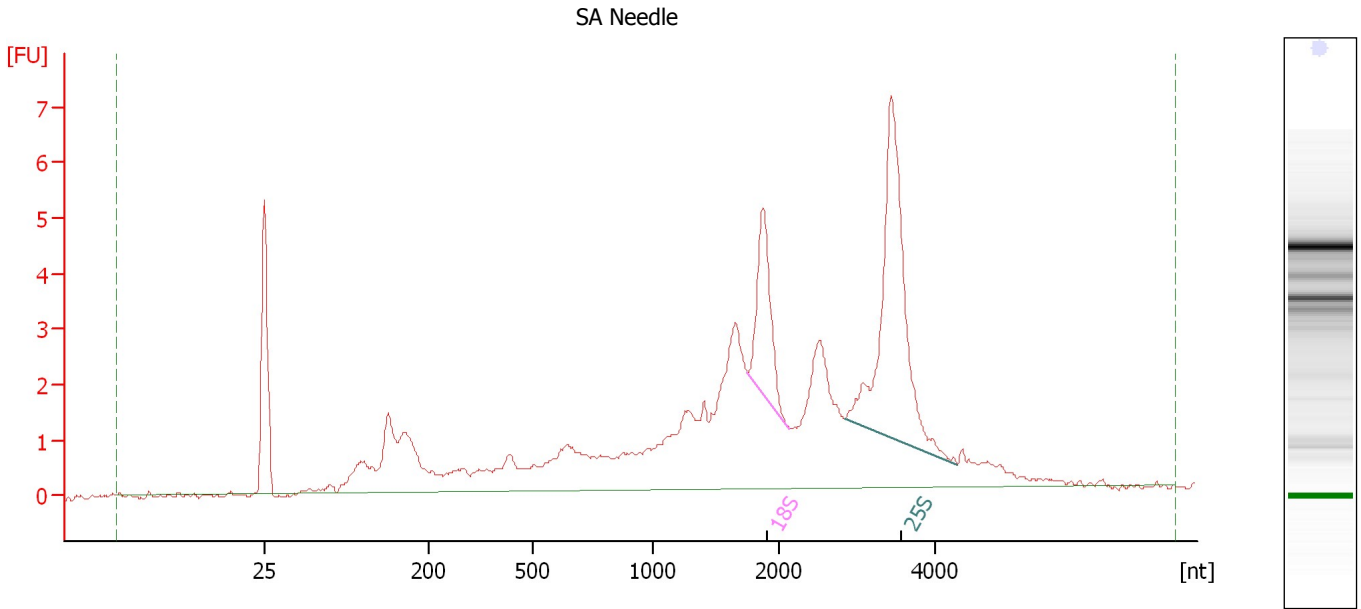
Fragment table for sample 5 : SA Root

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,431	2,124	20.1	10.1
25S	2,997	4,075	19.8	10.0

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : SA Needle

RNA Area: 79.5 RNA Integrity Number (RIN): 7.2 (B.02.08)
RNA Concentration: 71 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 2.7 Result Flagging Label: RIN: 7.20

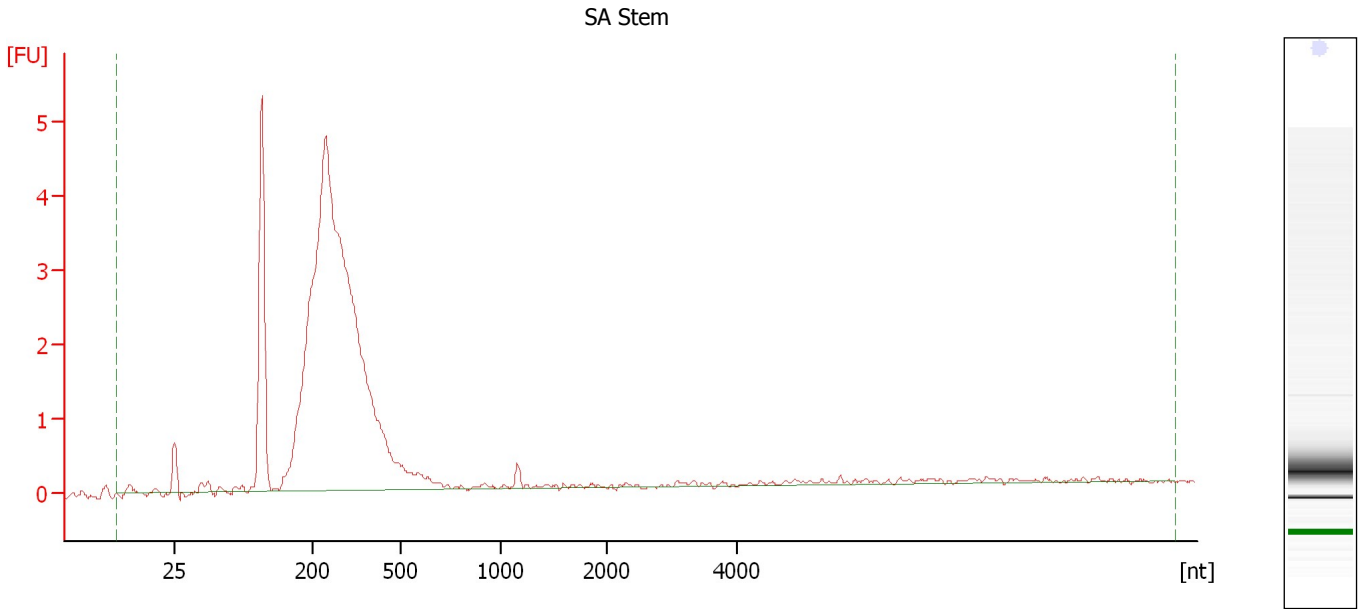
Fragment table for sample 6 : SA Needle

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,753	2,134	4.9	6.1
25S	2,862	4,305	13.2	16.6

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



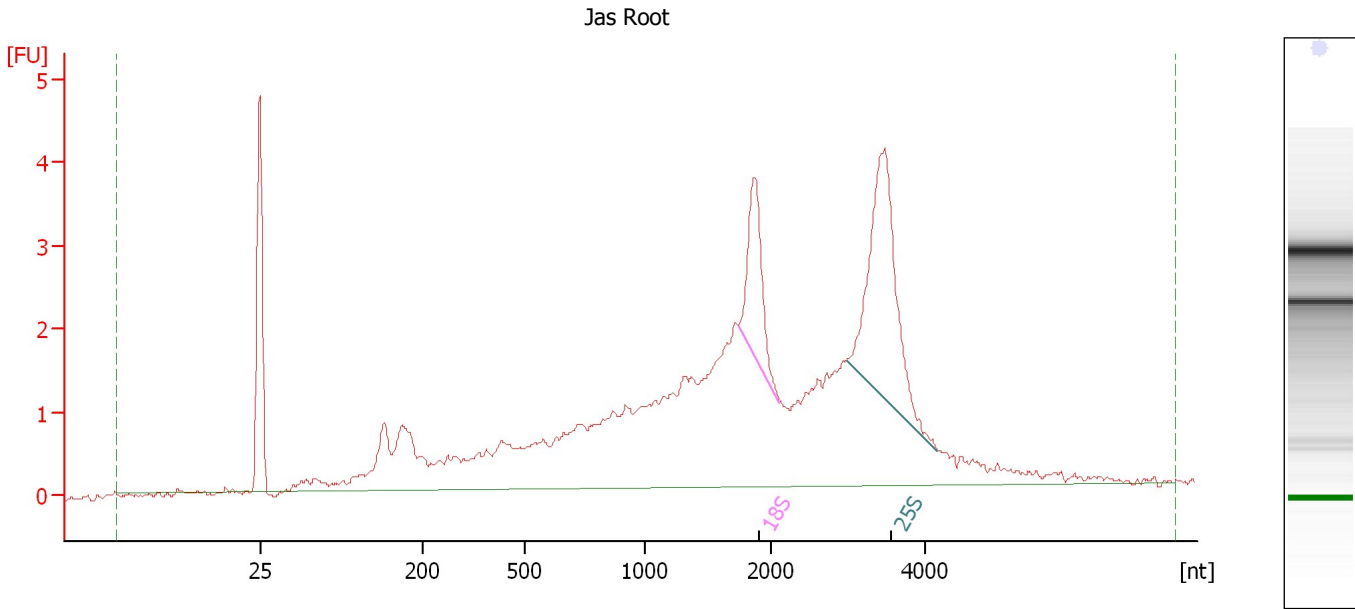
Overall Results for sample 7 : SA Stem

RNA Area:	47.2	RNA Integrity Number (RIN):	1.3 (B.02.08)
RNA Concentration:	42 ng/μl	Result Flagging Color:	
rRNA Ratio [25s / 18s]:	0.0	Result Flagging Label:	RIN: 1.30

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Jas Root

RNA Area: 66.1 RNA Integrity Number (RIN): 6.3 (B.02.08)
RNA Concentration: 59 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 2.4 Result Flagging Label: RIN: 6.30

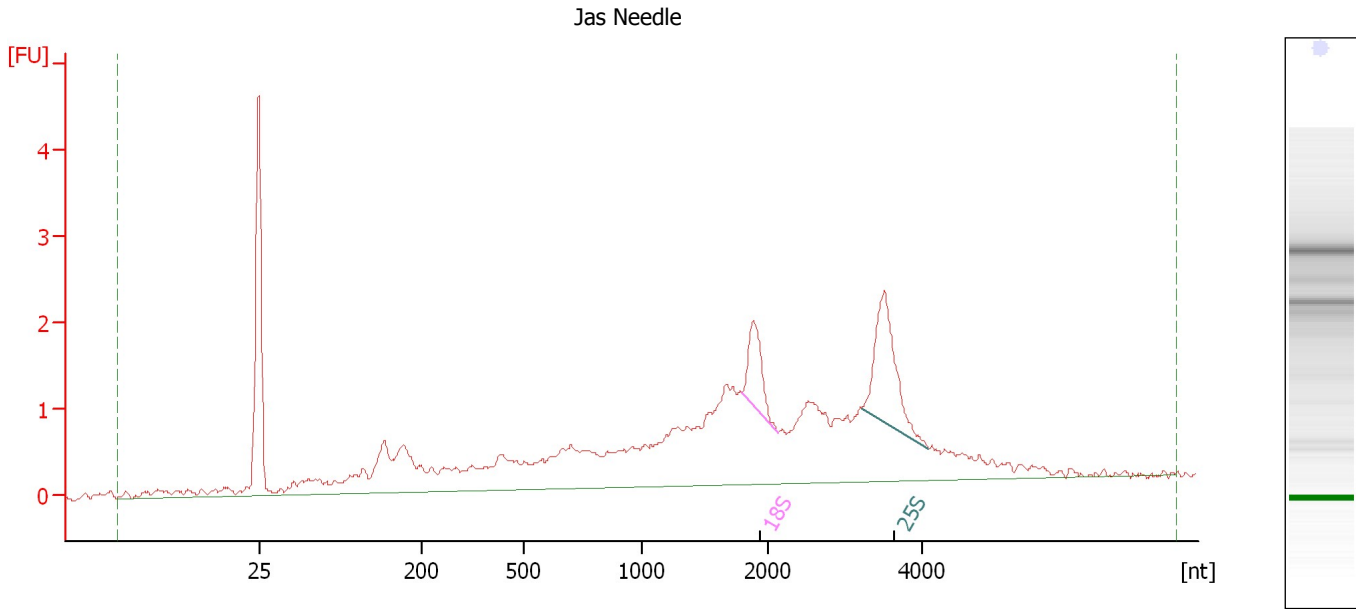
Fragment table for sample 8 : Jas Root

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,748	2,116	3.2	4.8
25S	2,989	4,166	7.7	11.6

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Jas Needle

RNA Area: 42.0 RNA Integrity Number (RIN): 5.3 (B.02.08)
RNA Concentration: 38 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 2.1 Result Flagging Label: RIN: 5.30

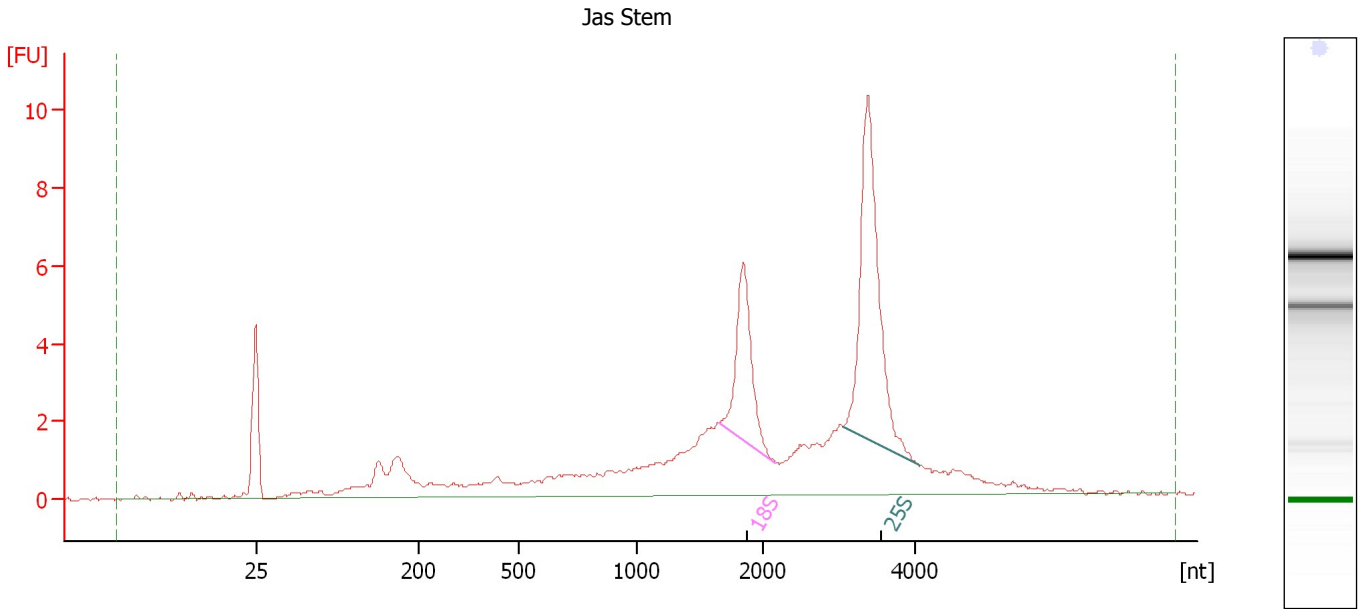
Fragment table for sample 9 : Jas Needle

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,797	2,128	1.4	3.4
25S	3,226	4,102	2.9	7.0

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Jas Stem

RNA Area: 78.9 RNA Integrity Number (RIN): 7.9 (B.02.08)
RNA Concentration: 71 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 2.1 Result Flagging Label: RIN: 7.90

Fragment table for sample 10 : Jas Stem

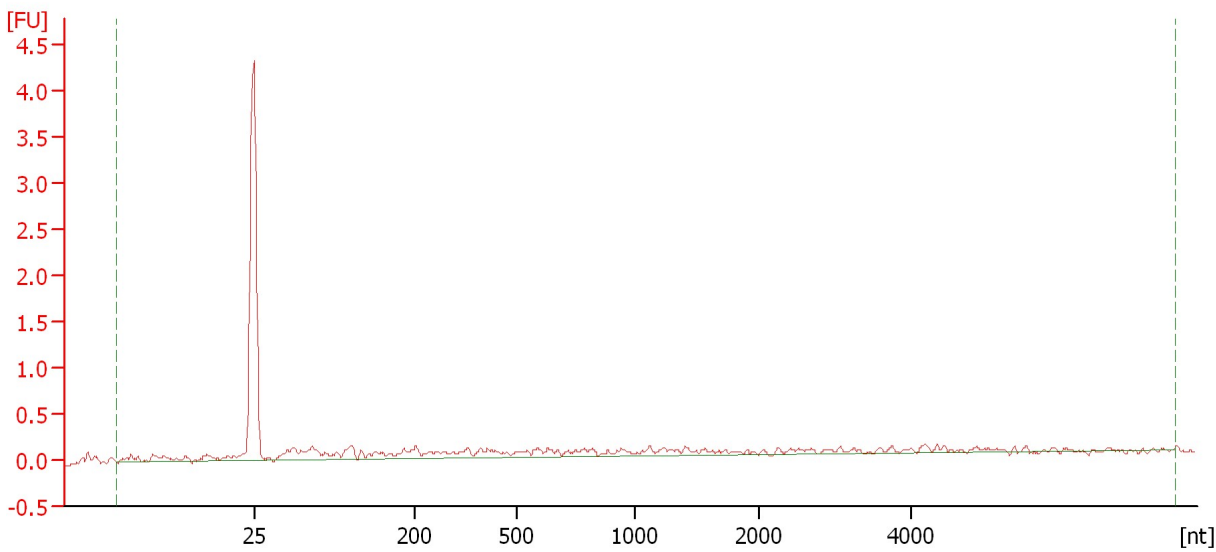
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,657	2,168	7.5	9.5
25S	3,047	4,038	15.6	19.7

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...

Sample 11



Overall Results for sample 11 : Sample 11

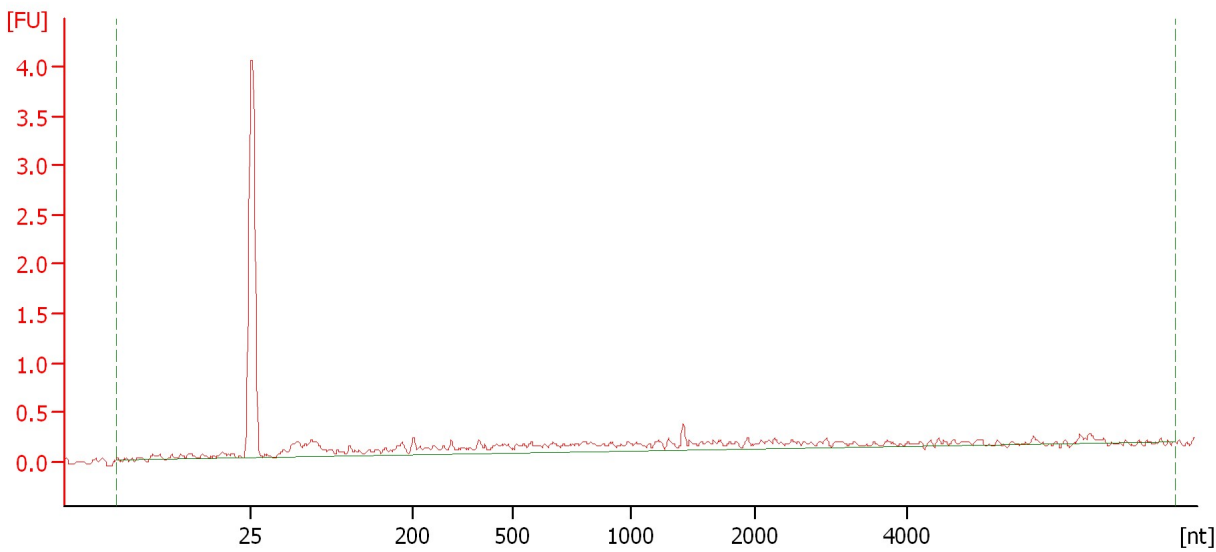
RNA Area:	6.0	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	5 ng/μl	Result Flagging Color:	
rRNA Ratio [25s / 18s]:	0.0	Result Flagging Label:	RIN N/A

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Electropherogram Summary Continued ...

Sample 12



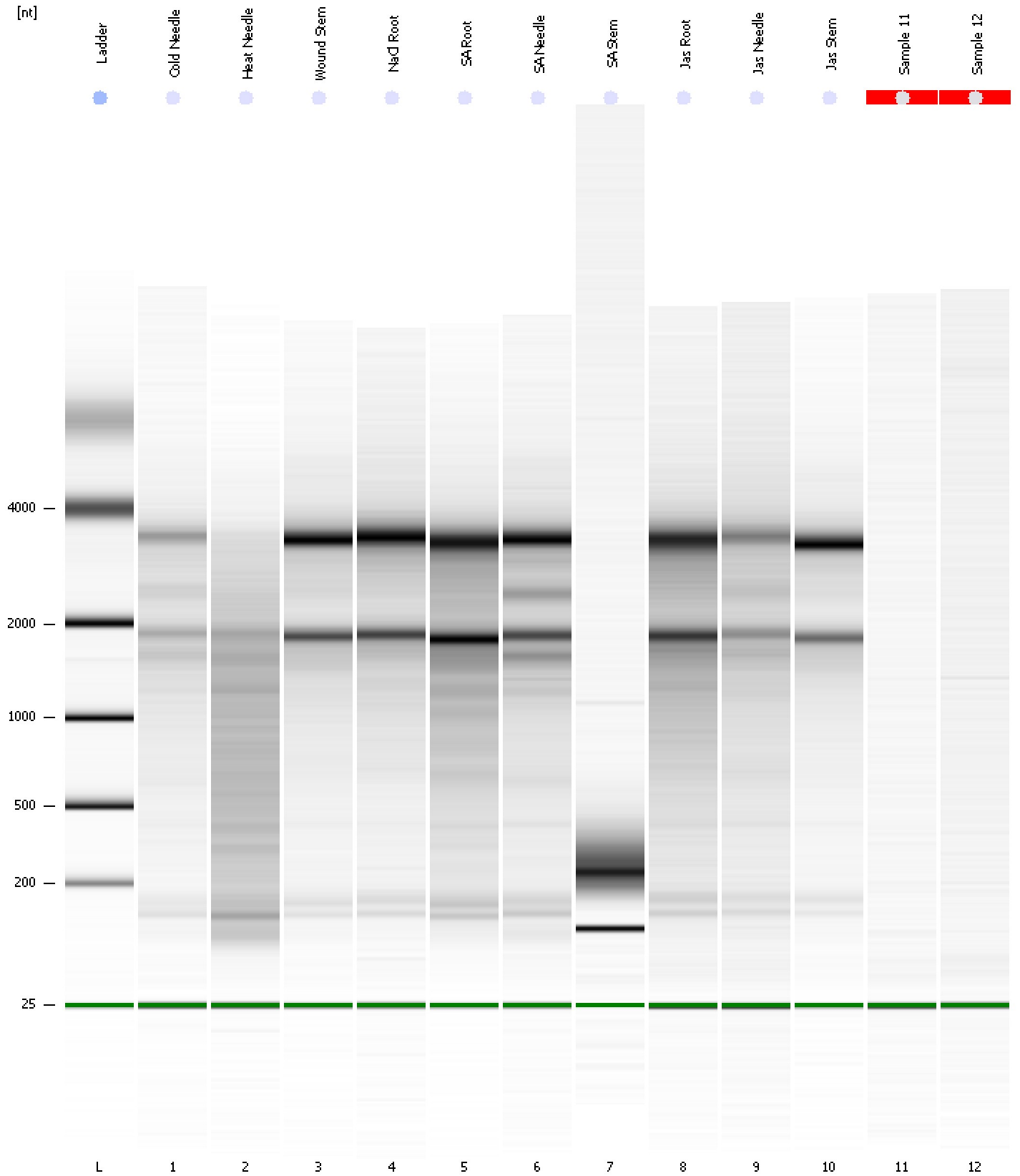
Overall Results for sample 12 : Sample 12

RNA Area:	5.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	5 ng/μl	Result Flagging Color:	
rRNA Ratio [25s / 18s]:	0.0	Result Flagging Label:	RIN N/A

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
Modified: 9/10/2014 3:27:26 PM

Gel Image



Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad

Created: 9/10/2014 3:03:41 PM
 Modified: 9/10/2014 3:27:26 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		9/10/2014 3:27:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-09-10\2014-09-10_005.xad)		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/10/2014 3:03:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1