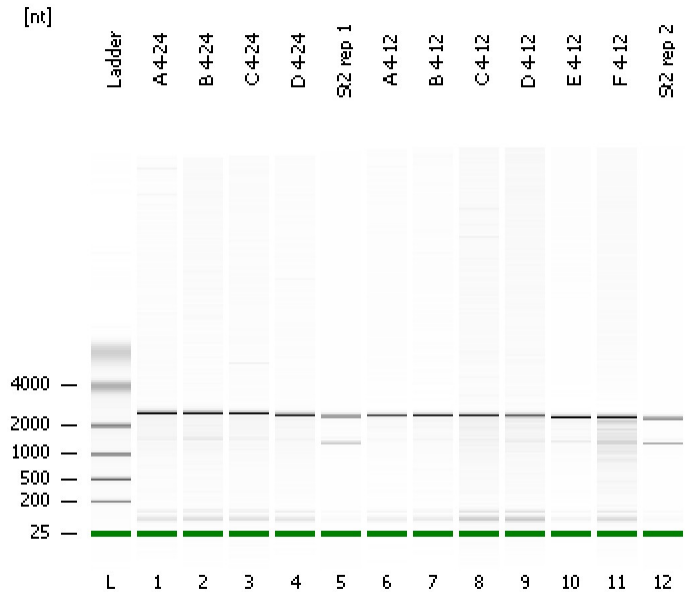


Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

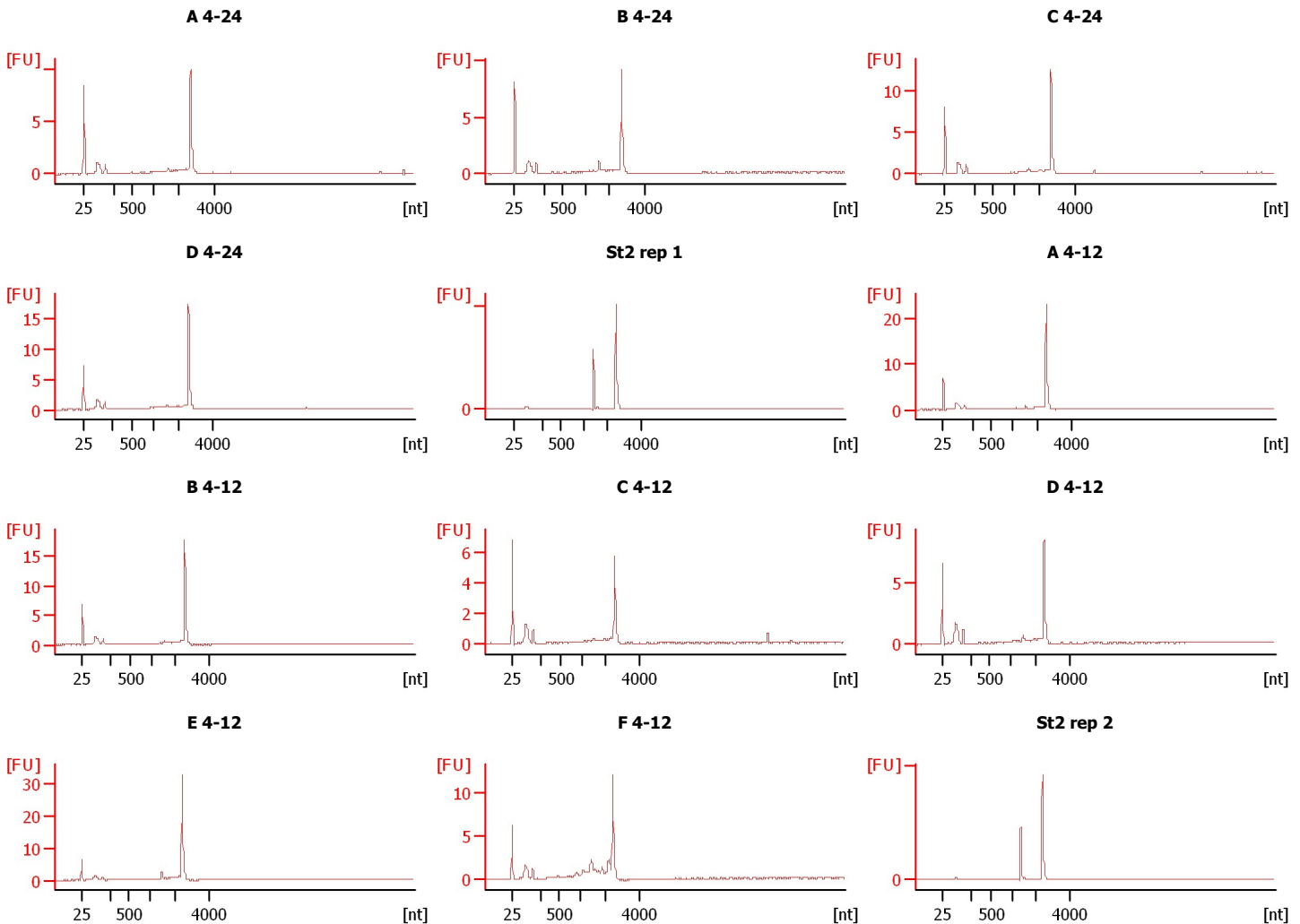
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\mRNA Nano Series II.xsy

Assay Class: mRNA Nano
Version: 2.5
Assay Comments: mRNA Analysis ng sensitivity

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Chip Information:

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



Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
A 4-24		✓		
B 4-24		✓		
C 4-24		✓		
D 4-24		✓		
St2 rep 1		✓		
A 4-12		✓		
B 4-12		✓		
C 4-12		✓		
D 4-12		✓		
E 4-12		✓		
F 4-12		✓		
St2 rep 2		✓		
Ladder		✓		

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

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 13
Minimum Visible Range [s] : 14
Maximum Visible Range [s] : 85
Start Analysis Time Range [s] : 15
End Analysis Time Range [s] : 84
Ladder Concentration [ng/ μ l] : 150
Lower Marker Concentration [ng/ μ l] : 0
Upper Marker Concentration [ng/ μ l] : 0
Used Lower Marker for Quantitation
Standard Curve Fit is Logarithmic
Show Data Aligned to Lower Marker

Integrator Settings

Integration Start Time [s] : 15
Integration End Time [s] : 84
Slope Threshold : 0.2
Height Threshold [FU] : 0.5
Area Threshold : 0.1
Width Threshold [s] : 0.2
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

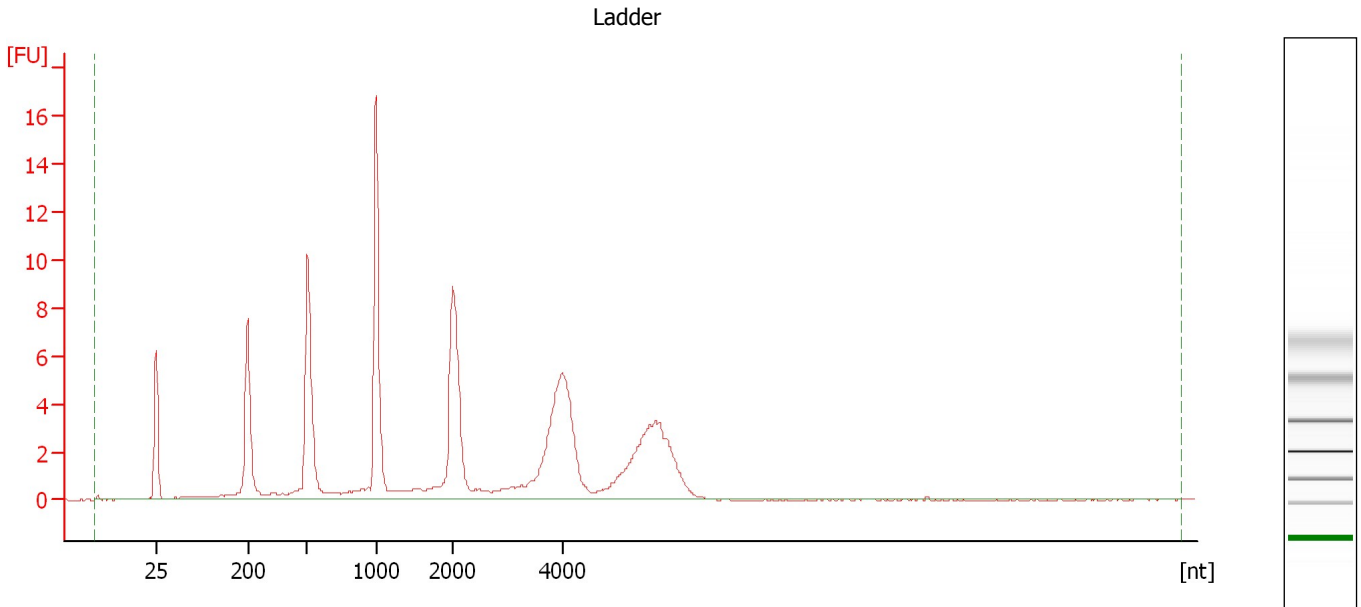
Ladder

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

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary



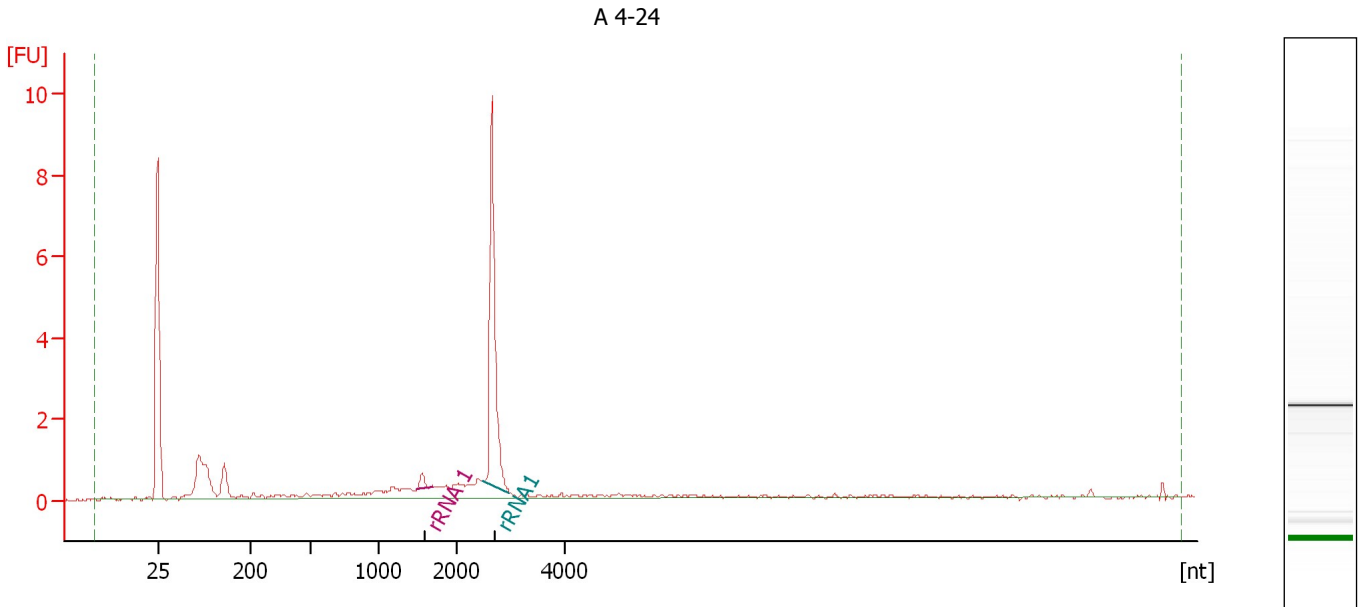
Overall Results for Ladder

RNA Area: 118.6 RNA Concentration: 150 ng/μl

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : A 4-24

RNA Area: 27.9 rRNA Contamination: 0.0 %
RNA Concentration: 35 ng/μl

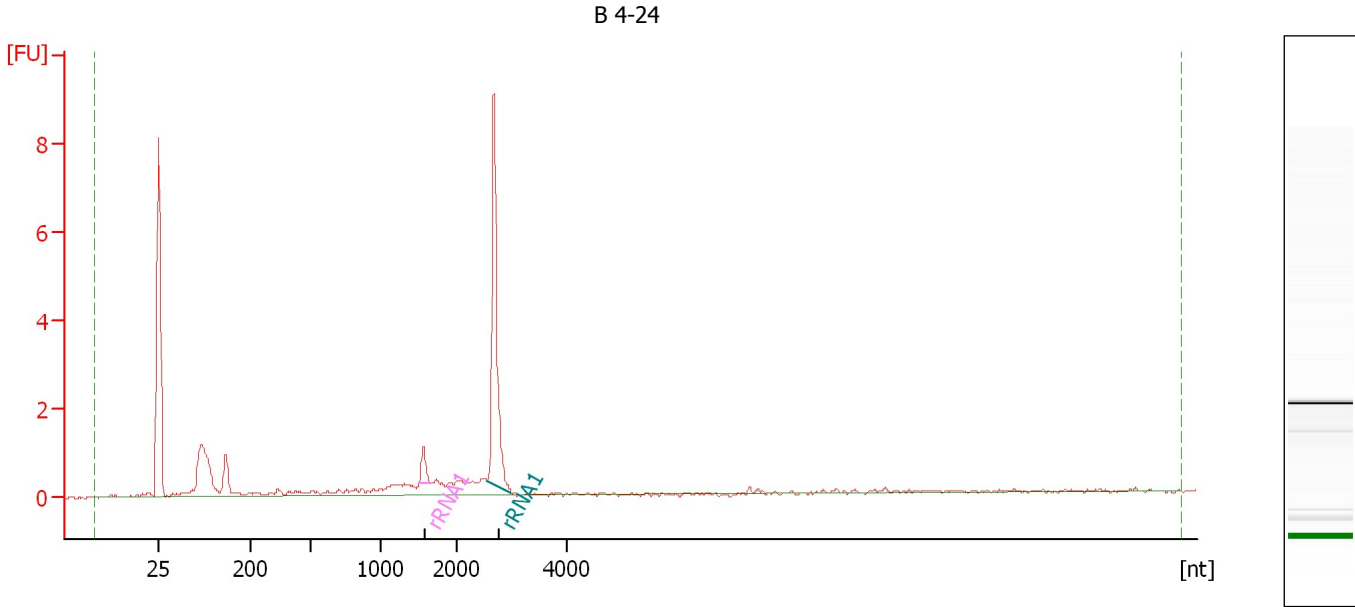
Fragment table for sample 1 : A 4-24

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,502	1,691	0.3	1.1
rRNA1	2,472	2,974	8.5	30.4

Assay Class: mRNA Nano
 Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
 Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : B 4-24

RNA Area: 22.6 rRNA Contamination: 36.9 %
 RNA Concentration: 29 ng/μl

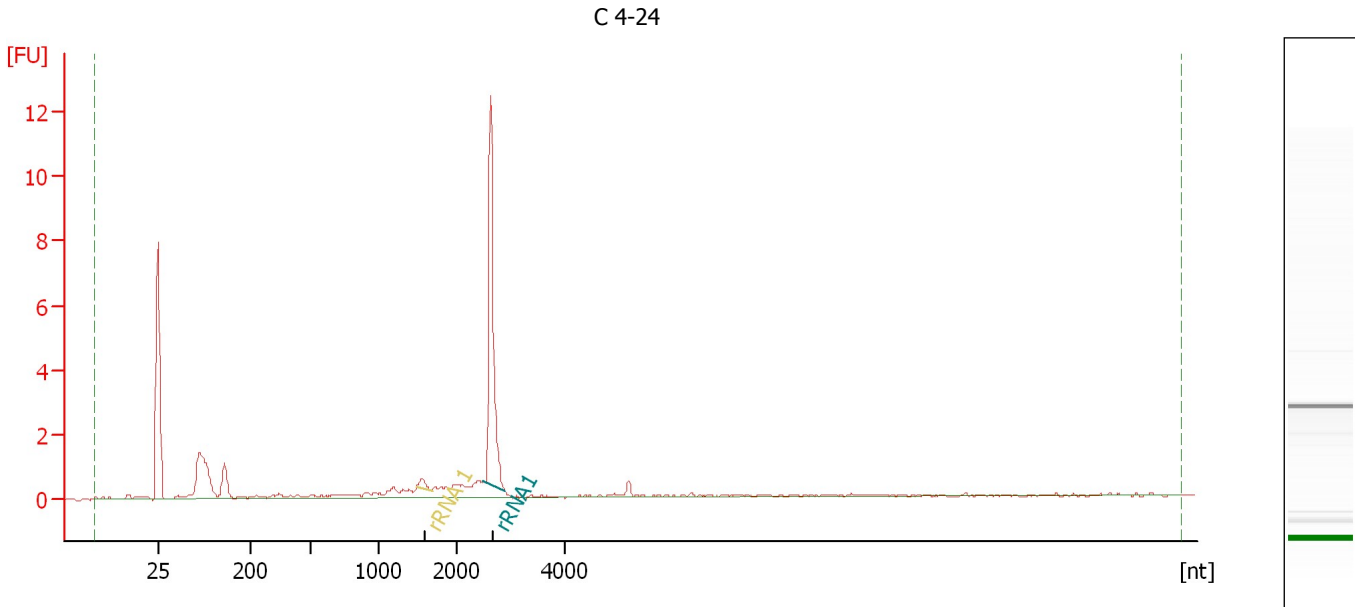
Fragment table for sample 2 : B 4-24

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA1	1,505	1,650	0.7	3.1
rRNA1	2,538	2,973	7.6	33.8

Assay Class: mRNA Nano
 Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
 Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : C 4-24

RNA Area: 26.5 rRNA Contamination: 0.0 %
 RNA Concentration: 33 ng/μl

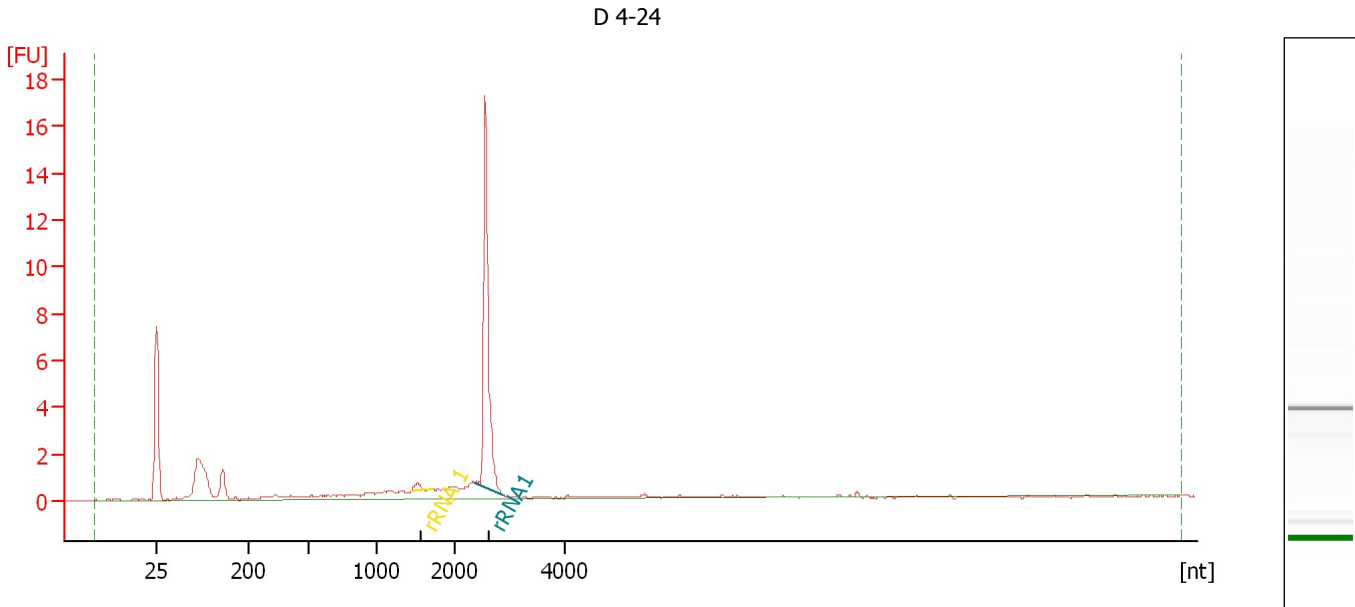
Fragment table for sample 3 : C 4-24

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,502	1,691	0.3	1.1
rRNA1	2,472	2,887	10.0	37.9

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : D 4-24

RNA Area: 38.4 rRNA Contamination: 0.0 %
RNA Concentration: 49 ng/μl

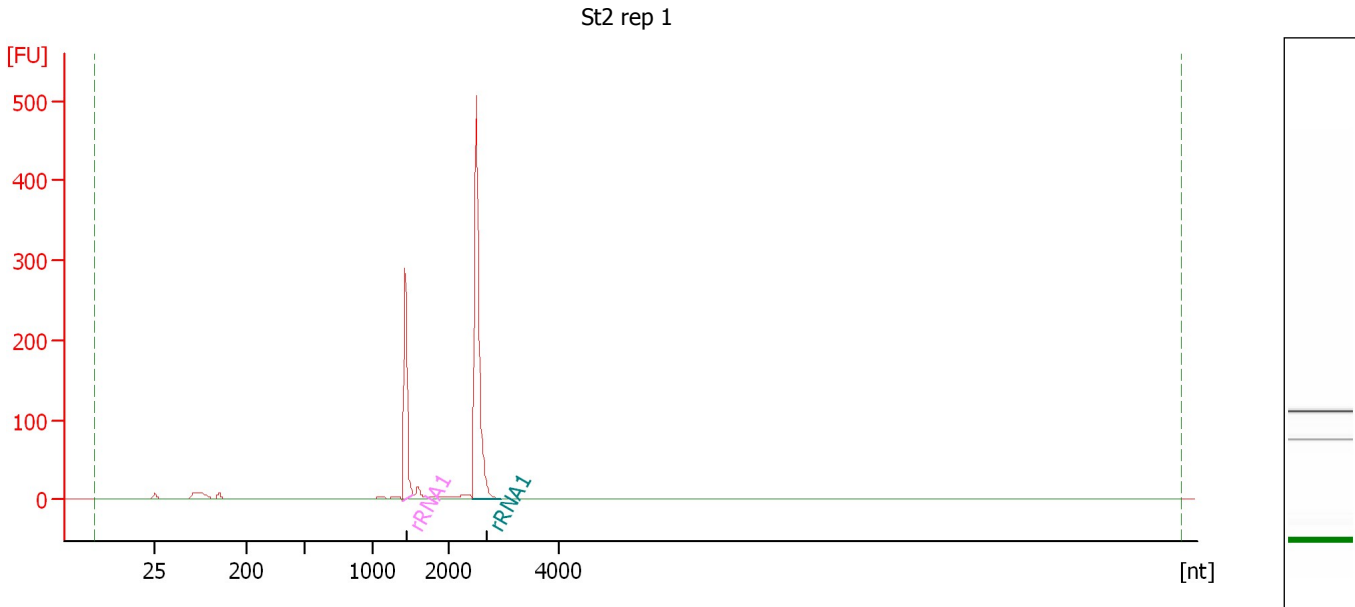
Fragment table for sample 4 : D 4-24

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,440	1,710	0.4	1.0
rRNA1	2,388	2,874	13.8	35.8

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : St2 rep 1

RNA Area: 761.8 rRNA Contamination: 83.6 %
RNA Concentration: 964 ng/μl

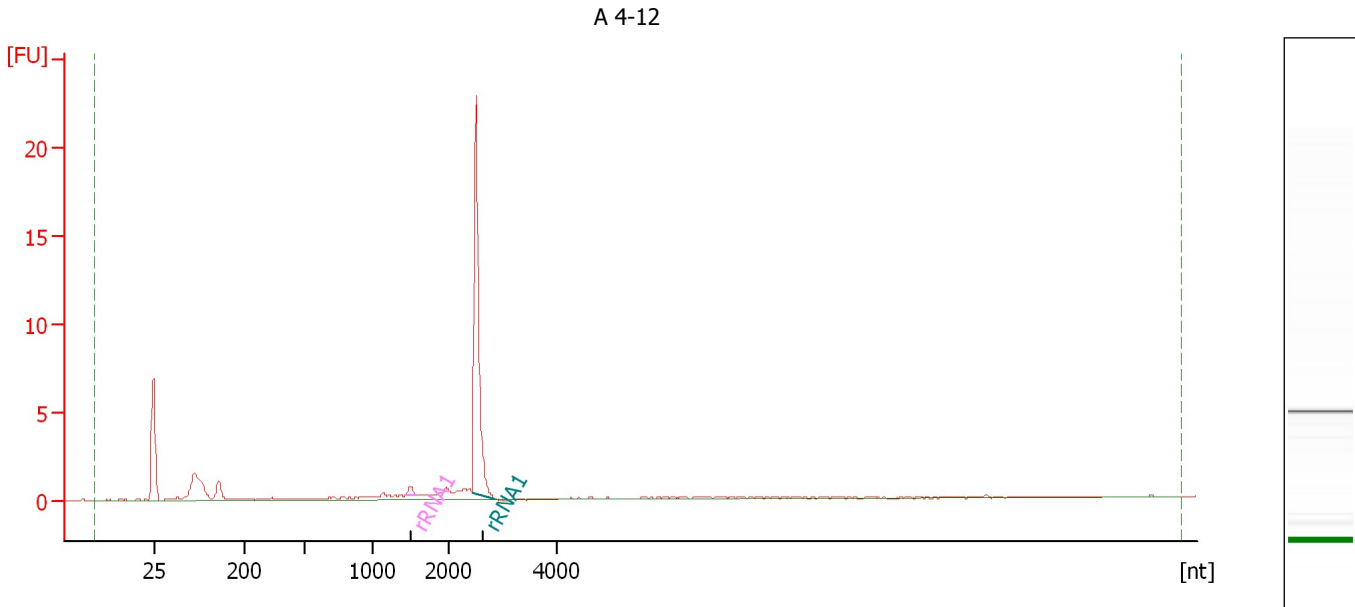
Fragment table for sample 5 : St2 rep 1

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA1	1,370	1,527	211.1	27.7
rRNA1	2,409	2,922	425.9	55.9

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : A 4-12

RNA Area: 35.1 rRNA Contamination: 54.5 %
RNA Concentration: 44 ng/μl

Fragment table for sample 6 : A 4-12

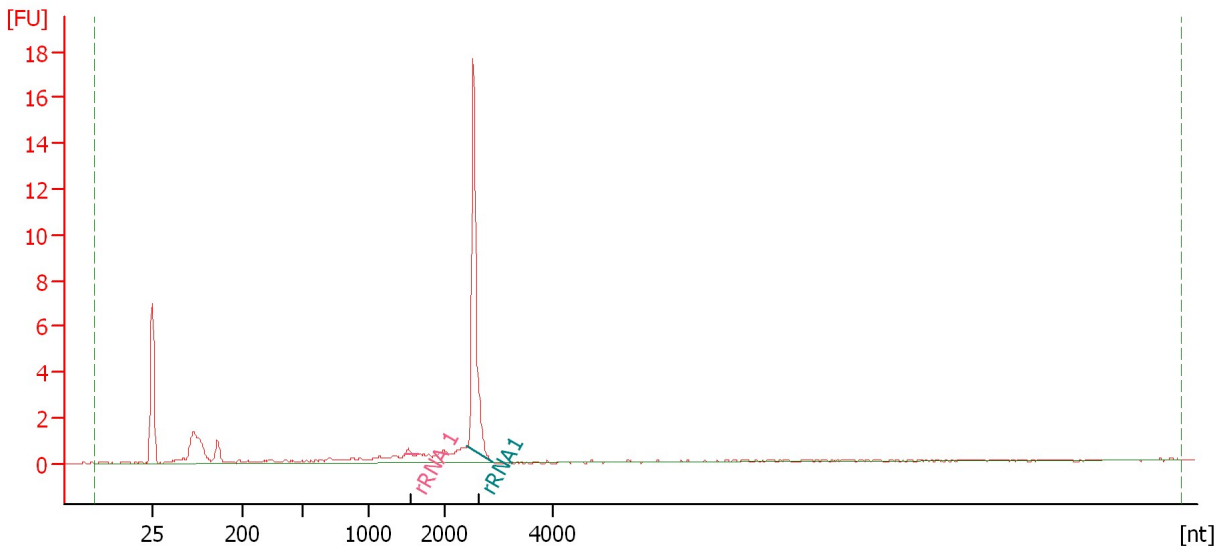
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA1	1,441	1,578	0.4	1.2
rRNA1	2,438	2,865	18.7	53.3

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...

B 4-12



Overall Results for sample 7 : B 4-12

RNA Area: 33.4 rRNA Contamination: 0.0 %
RNA Concentration: 42 ng/μl

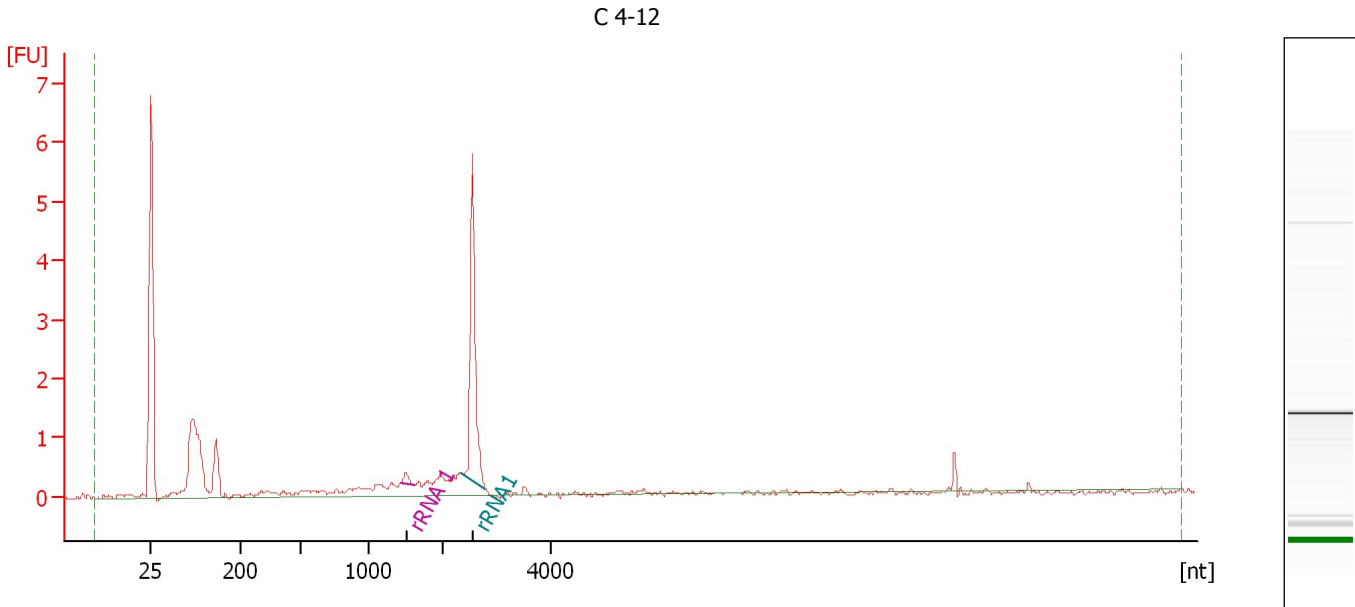
Fragment table for sample 7 : B 4-12

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,472	1,664	0.2	0.6
rRNA1	2,412	2,882	14.0	41.9

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C 4-12

RNA Area: 20.6 rRNA Contamination: 0.0 %
RNA Concentration: 26 ng/μl

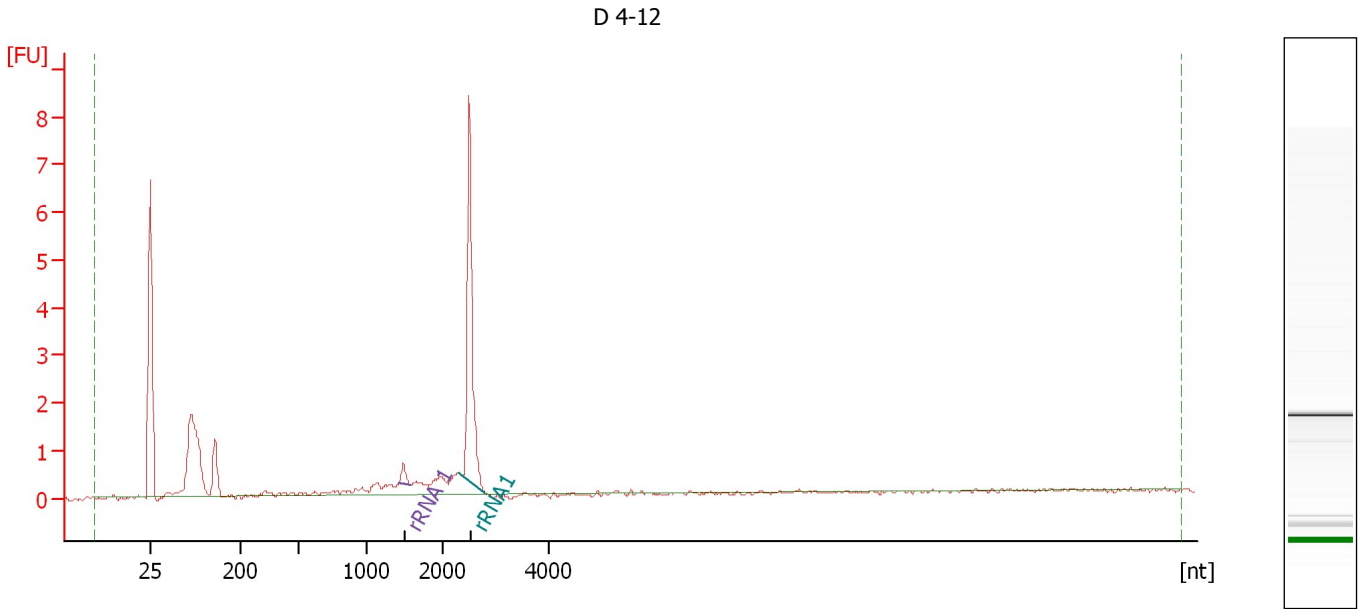
Fragment table for sample 8 : C 4-12

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,437	1,629	0.2	0.9
rRNA1	2,327	2,780	4.7	23.0

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : D 4-12

RNA Area: 23.3 rRNA Contamination: 0.0 %
RNA Concentration: 29 ng/μl

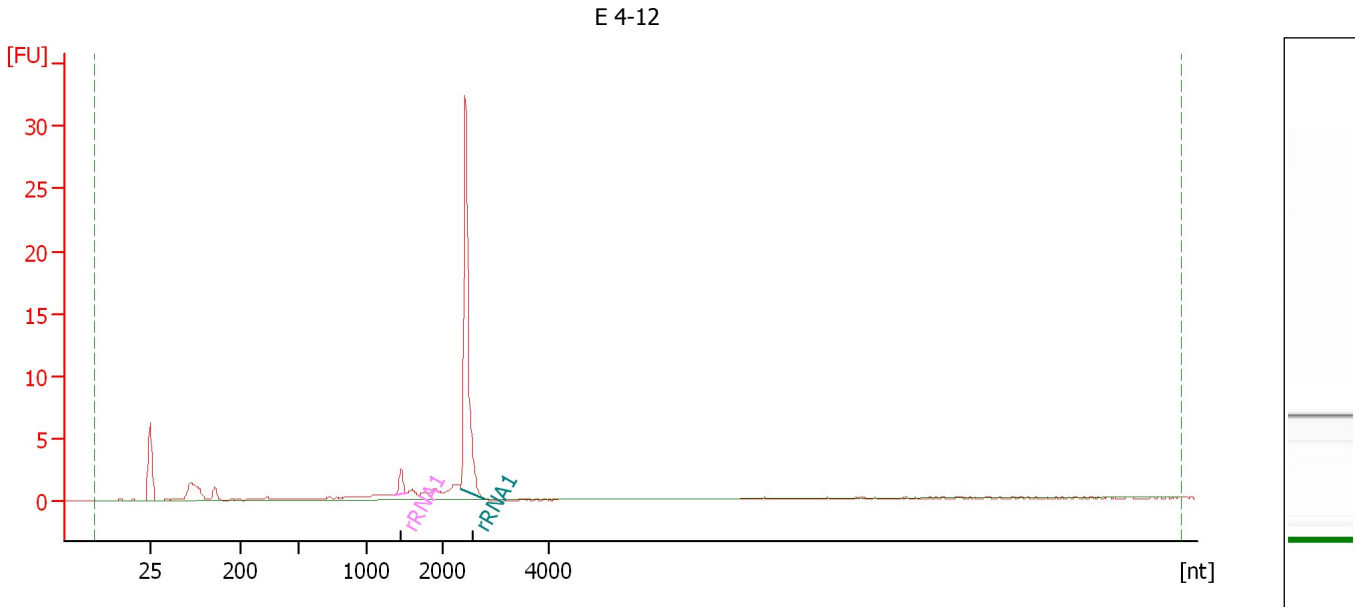
Fragment table for sample 9 : D 4-12

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA 1	1,428	1,593	0.4	1.6
rRNA1	2,318	2,811	7.1	30.5

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : E 4-12

RNA Area: 50.2 rRNA Contamination: 56.1 %
RNA Concentration: 64 ng/μl

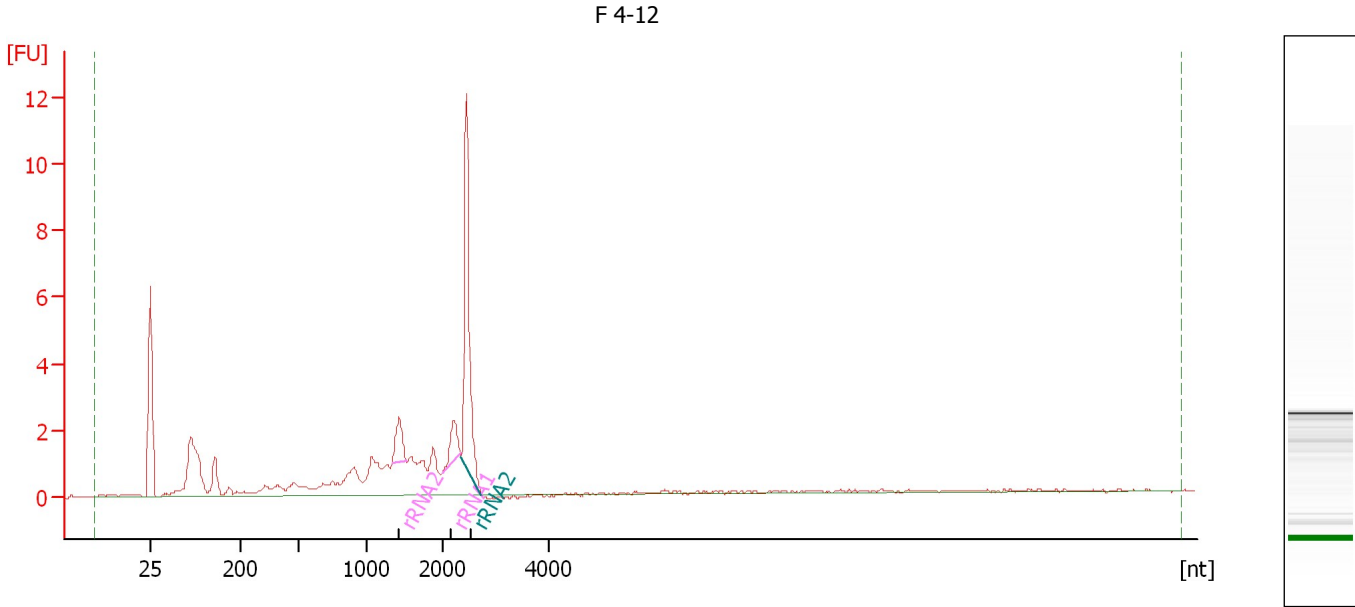
Fragment table for sample 10 : E 4-12

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA1	1,369	1,528	1.6	3.3
rRNA1	2,365	2,796	26.6	52.9

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : F 4-12

RNA Area: 49.4 rRNA Contamination: 26.8 %
RNA Concentration: 62 ng/μl

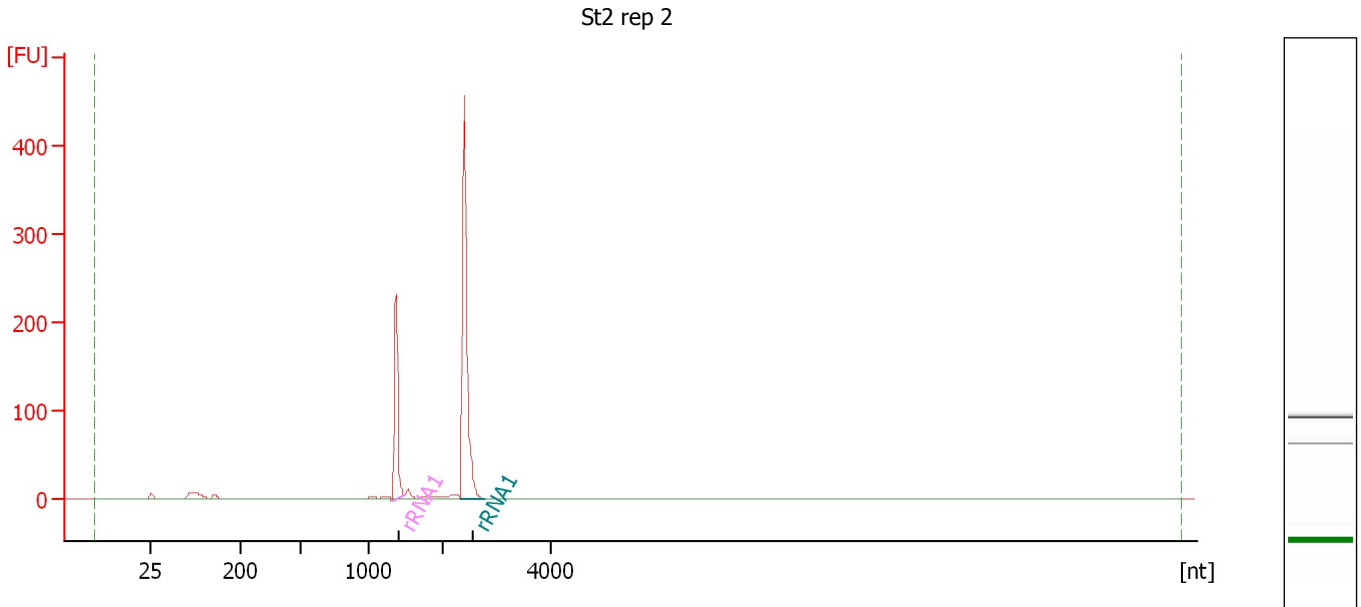
Fragment table for sample 11 : F 4-12

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA2	1,338	1,528	1.8	3.7
rRNA1	2,008	2,335	1.5	3.0
rRNA2	2,350	2,736	9.9	20.1

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 12 : St2 rep 2

RNA Area: 634.1 rRNA Contamination: 85.9 %
RNA Concentration: 802 ng/μl

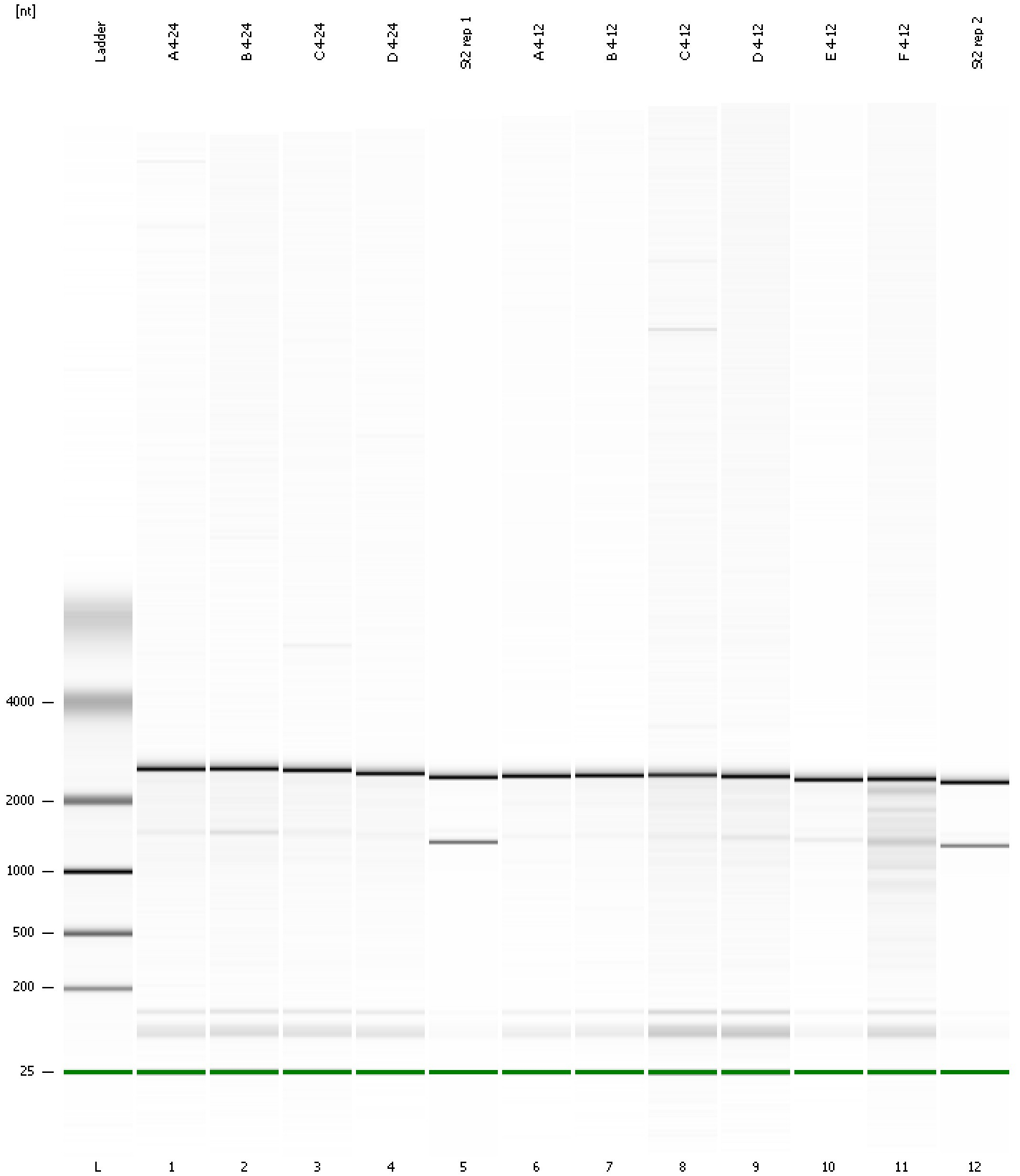
Fragment table for sample 12 : St2 rep 2

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA1	1,319	1,477	171.2	27.0
rRNA1	2,305	2,780	373.4	58.9

Assay Class: mRNA Nano
Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
Modified: 4/25/2012 2:01:07 PM

Gel Image



Assay Class: mRNA Nano
 Data Path: C:\...ettings\Bioanalyzer\2012-04-25\2012-04-25_004_corrected.xad

Created: 4/25/2012 1:23:28 PM
 Modified: 4/25/2012 2:01:07 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		4/25/2012 1:50:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-25\2012-04-25_004.xad)		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/25/2012 1:23:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1