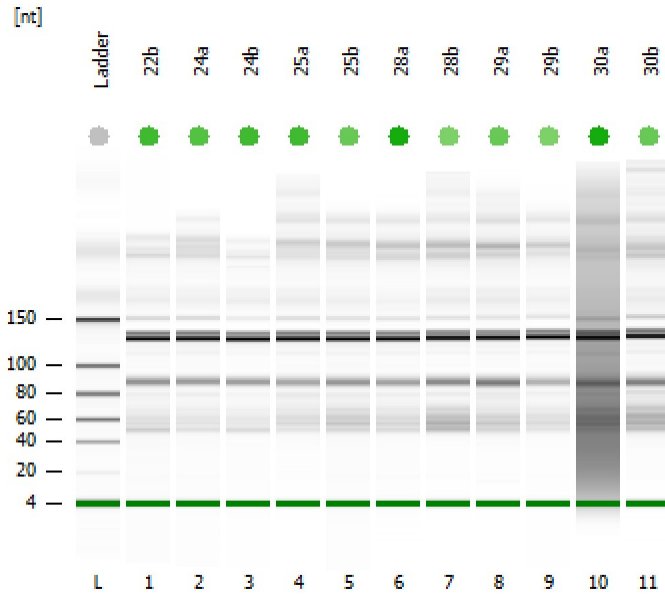


Assay Class: Small RNA
Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
Modified: 12/11/2019 1:19:52 PM

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 (x86)\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Small RNA Series II.xsy

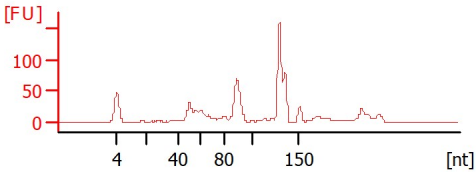
Assay Class: Small RNA
Version: 1.2
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

© Copyright 2007 - 2009 Agilent Technologies, Inc.

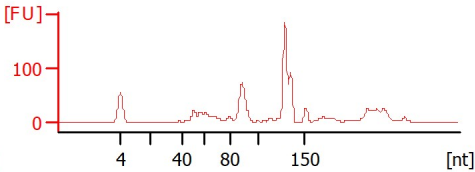
Chip Information:

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

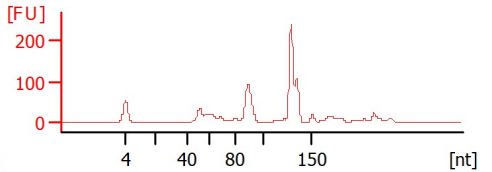
22b
10 % miRNA; Concentration: 610.60 pg/µl



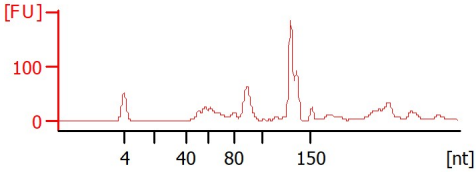
24a
9 % miRNA; Concentration: 524.60 pg/µl



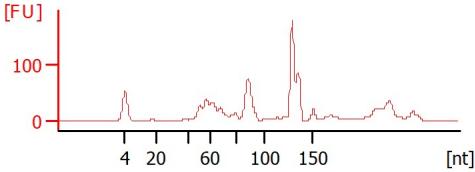
24b
10 % miRNA; Concentration: 749.70 pg/µl



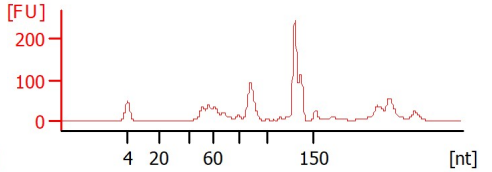
25a
10 % miRNA; Concentration: 738.20 pg/µl



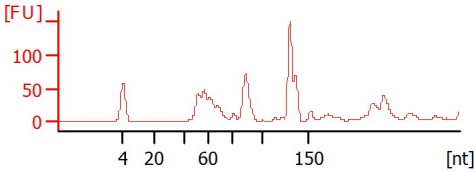
25b
8 % miRNA; Concentration: 630 pg/µl



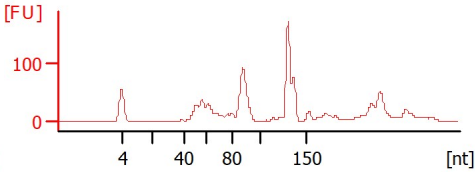
28a
12 % miRNA; Concentration: 1168.80 pg/µl



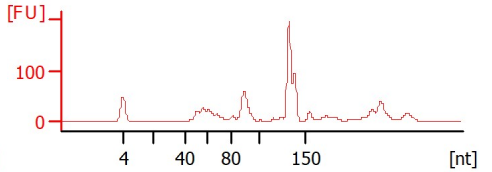
28b
7 % miRNA; Concentration: 485.80 pg/µl



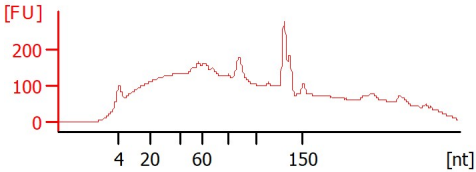
29a
8 % miRNA; Concentration: 650.20 pg/µl



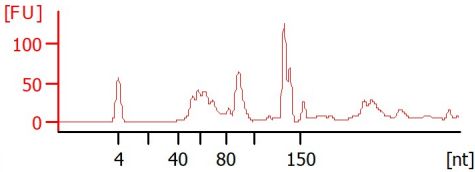
29b
7 % miRNA; Concentration: 487.10 pg/µl



30a
56 % miRNA; Concentration: 15462.80 p...















30b
8 % miRNA; Concentration: 527.70 pg/µl



Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
22b		✓	10 % miRNA; Concentration: 610.60 pg/μl	
24a		✓	9 % miRNA; Concentration: 524.60 pg/μl	
24b		✓	10 % miRNA; Concentration: 749.70 pg/μl	
25a		✓	10 % miRNA; Concentration: 738.20 pg/μl	
25b		✓	8 % miRNA; Concentration: 630 pg/μl	
28a		✓	12 % miRNA; Concentration: 1168.80 pg/μl	
28b		✓	7 % miRNA; Concentration: 485.80 pg/μl	
29a		✓	8 % miRNA; Concentration: 650.20 pg/μl	
29b		✓	7 % miRNA; Concentration: 487.10 pg/μl	
30a		✓	56 % miRNA; Concentration: 15462.80 pg/μl	
30b		✓	8 % miRNA; Concentration: 527.70 pg/μl	
Ladder		✓	Number of Peaks: 6	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
 Minimum Visible Range [s] : 30
 Maximum Visible Range [s] : 90
 Start Analysis Time Range [s] : 31
 End Analysis Time Range [s] : 89
 Ladder Concentration [pg/μl] : 2500
 Lower Marker Concentration [pg/μl] : 500
 Upper Marker Concentration [pg/μl] : 0
 Used Lower Marker for Quantitation
 Standard Curve Fit is Logarithmic
 Show Data Aligned to Lower Marker

Integrator Settings

Integration Start Time [s] : 30
 Integration End Time [s] : 89
 Slope Threshold : 0.6
 Height Threshold [FU] : 3
 Area Threshold : 0.2
 Width Threshold [s] : 0.5
 Baseline Plateau [s] : 60

Filter Settings

Filter Width [s] : 0.5
 Polynomial Order : 4

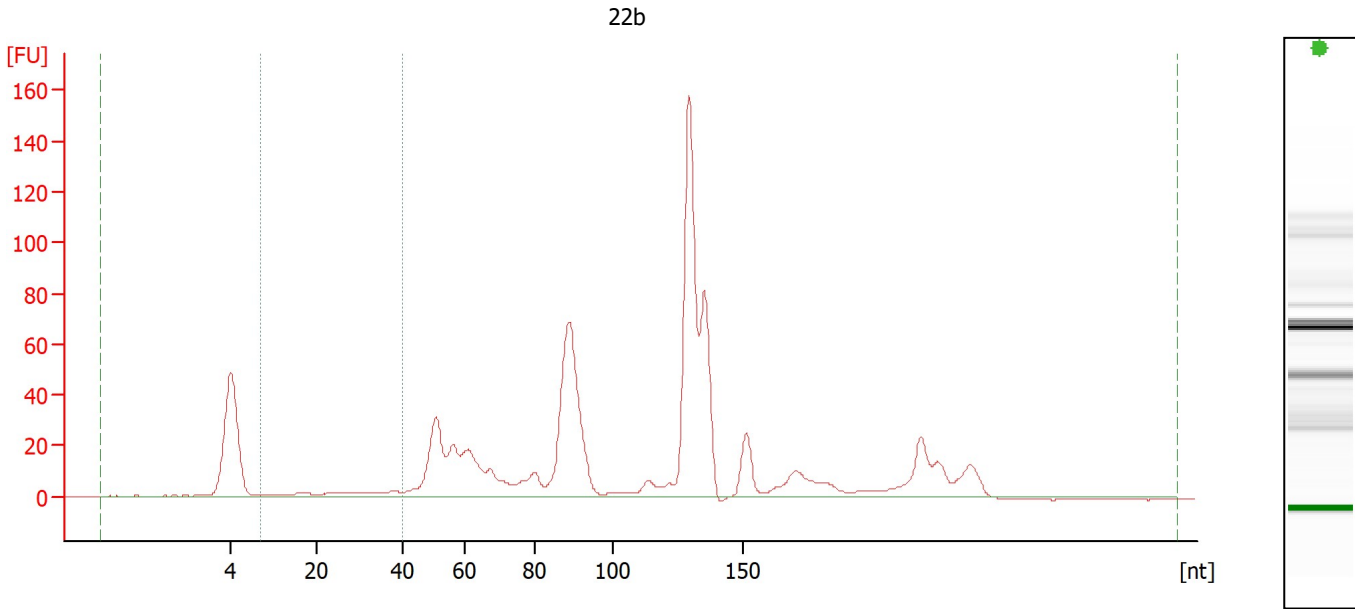
Ladder

Ladder Peak	Size
1	4
2	20
3	40
4	60
5	80
6	100
7	150

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary



Overall Results for sample 1 : 22b

Small RNA Concentration [pg/μl]:	6,403.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	610.6	Result Flagging Label:	10 % miRNA; Concentration: 610.60 pg/μl
miRNA / Small RNA Ratio [%]:	10		

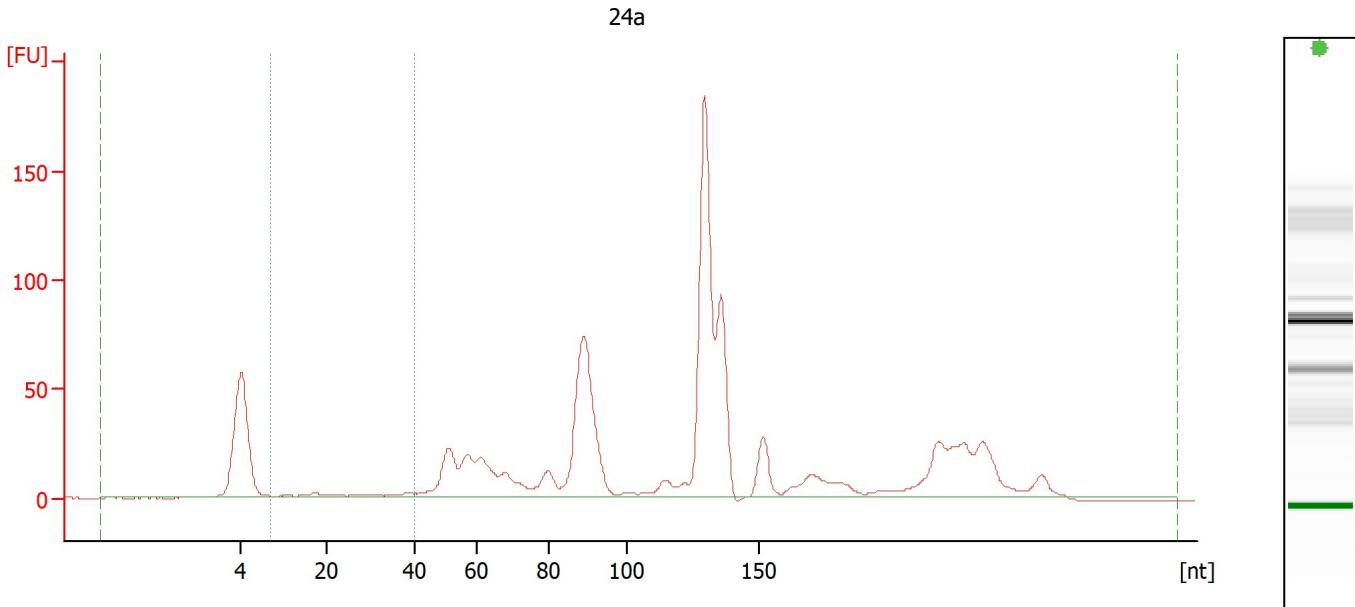
Region table for sample 1 : 22b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	319	111	53.6	6,403.6	100	
miRNA	10	40	27	32.2	610.6	10	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 24a

Small RNA Concentration [pg/μl]: 5,884.6
 miRNA Concentration [pg/μl]: 524.6
 miRNA / Small RNA Ratio [%]: 9

Result Flagging Color:
 Result Flagging Label: 9 % miRNA;
 Concentration: 524.60
 pg/μl

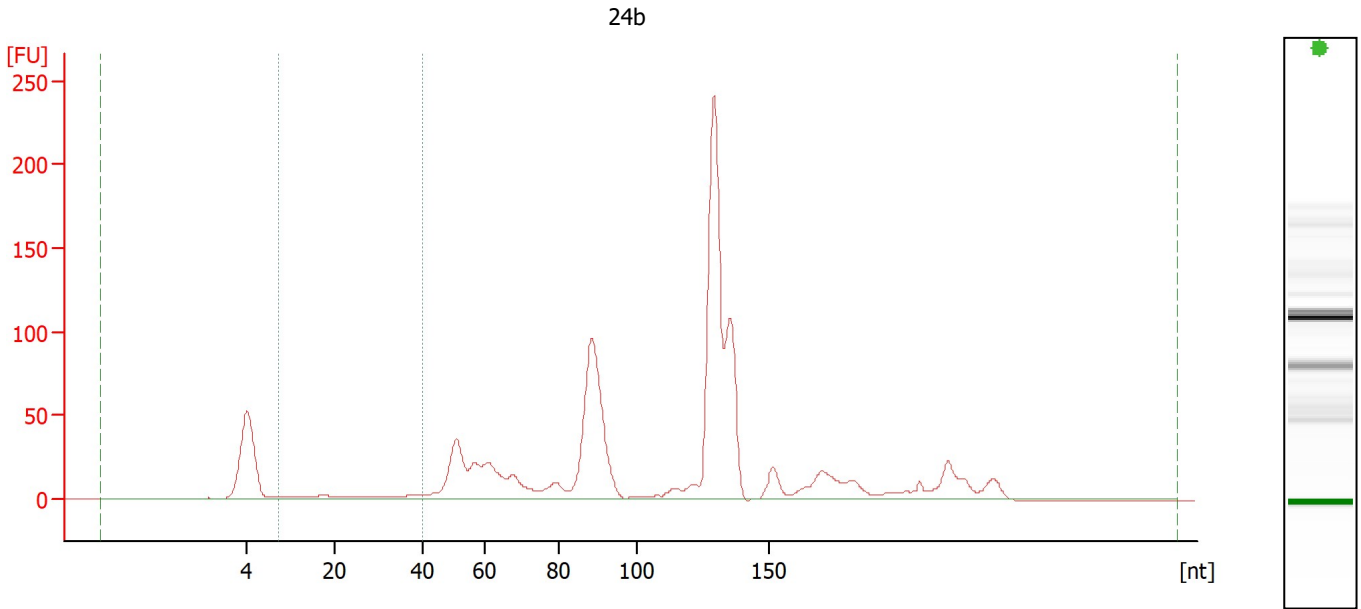
Region table for sample 2 : 24a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	310	124	54.0	5,884.6	100	
miRNA	10	40	25	36.2	524.6	9	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 24b

Small RNA Concentration [pg/μl]: 7,715.1
 miRNA Concentration [pg/μl]: 749.7
 miRNA / Small RNA Ratio [%]: 10

Result Flagging Color:
 Result Flagging Label: 10 % miRNA;
 Concentration: 749.70
 pg/μl

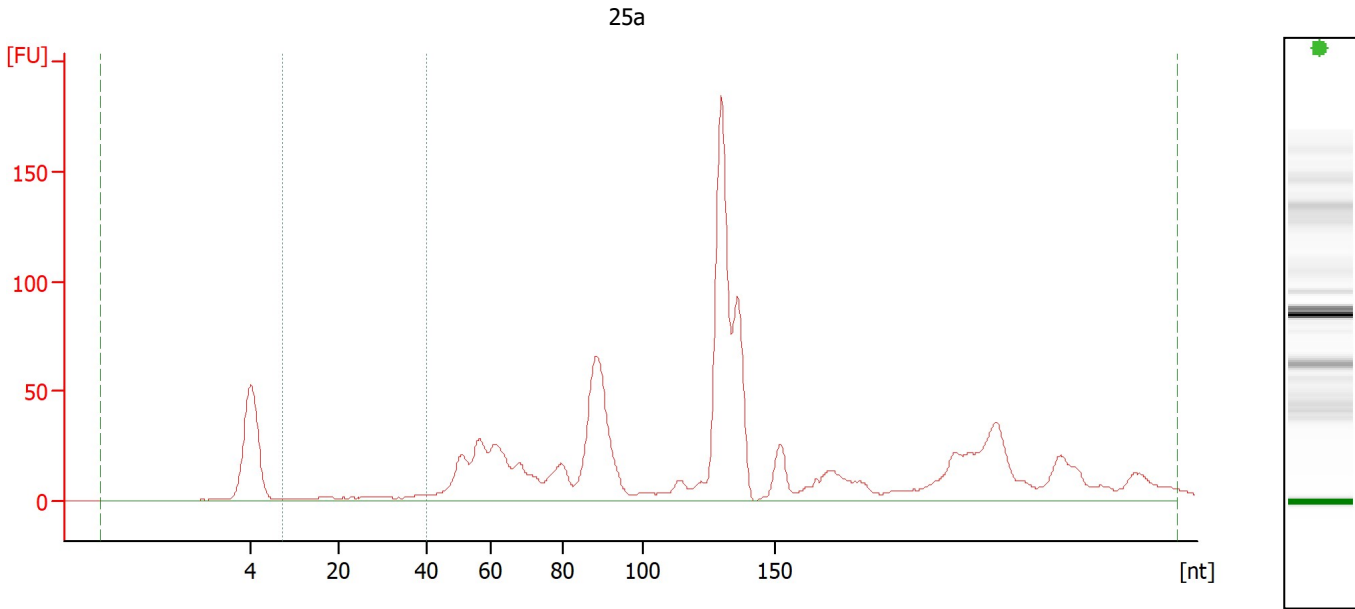
Region table for sample 3 : 24b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	305	111	48.9	7,715.1	100	
miRNA	10	40	26	33.8	749.7	10	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 25a

Small RNA Concentration [pg/μl]: 7,500.7
 miRNA Concentration [pg/μl]: 738.2
 miRNA / Small RNA Ratio [%]: 10

Result Flagging Color:
 Result Flagging Label: 10 % miRNA;
 Concentration: 738.20
 pg/μl

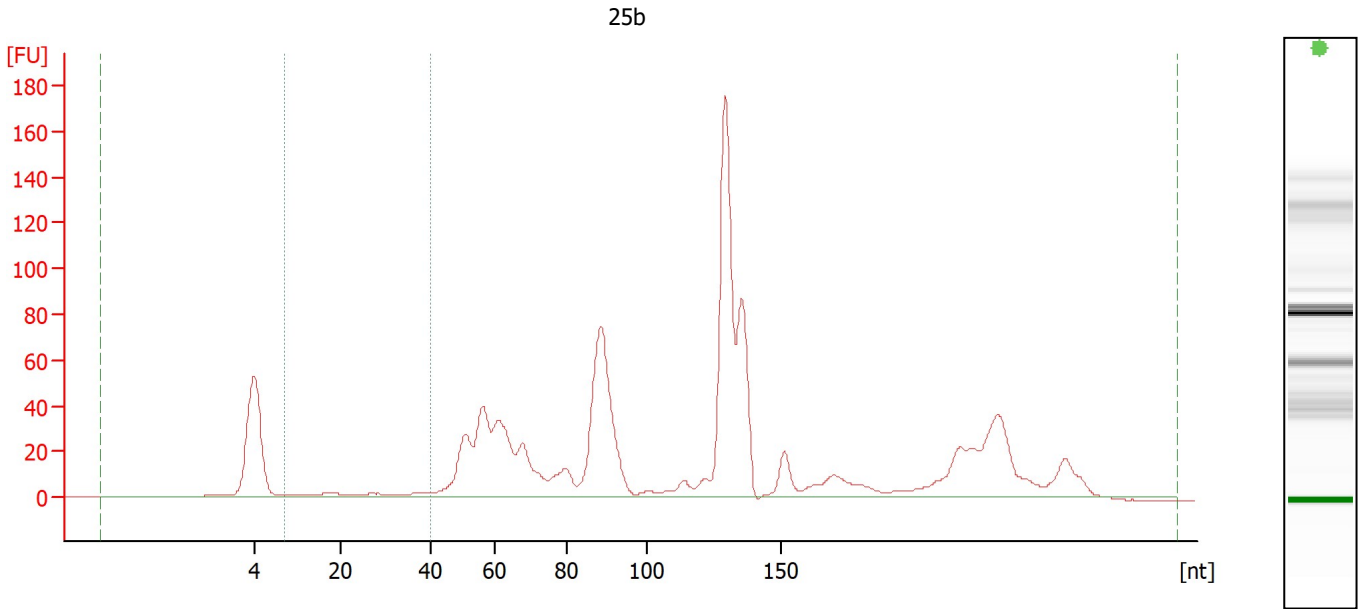
Region table for sample 4 : 25a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	301	136	55.8	7,500.7	100	
miRNA	10	40	26	33.8	738.2	10	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 25b

Small RNA Concentration [pg/μl]: 7,411.6
 miRNA Concentration [pg/μl]: 630.0
 miRNA / Small RNA Ratio [%]: 8

Result Flagging Color:
 Result Flagging Label: 8 % miRNA;
 Concentration: 630
 pg/μl

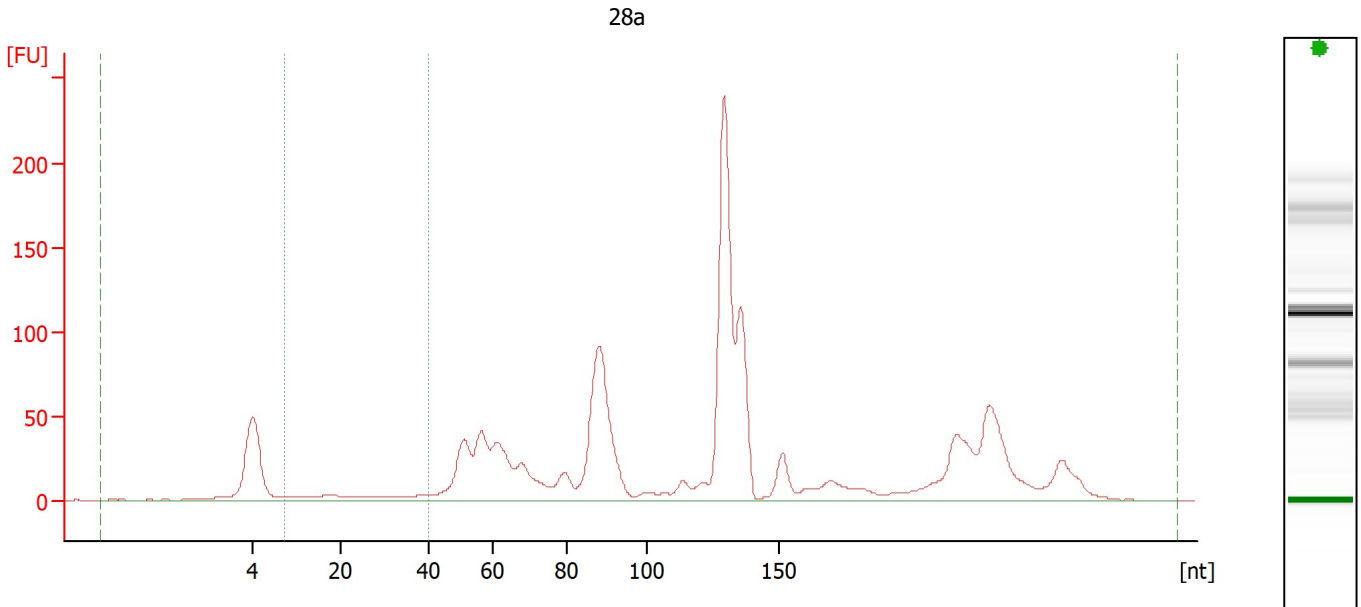
Region table for sample 5 : 25b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	299	122	56.4	7,411.6	100	
miRNA	10	40	25	34.4	630.0	8	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 28a

Small RNA Concentration [pg/μl]:	10,006.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,168.8	Result Flagging Label:	12 % miRNA; Concentration: 1168.80 pg/μl
miRNA / Small RNA Ratio [%]:	12		

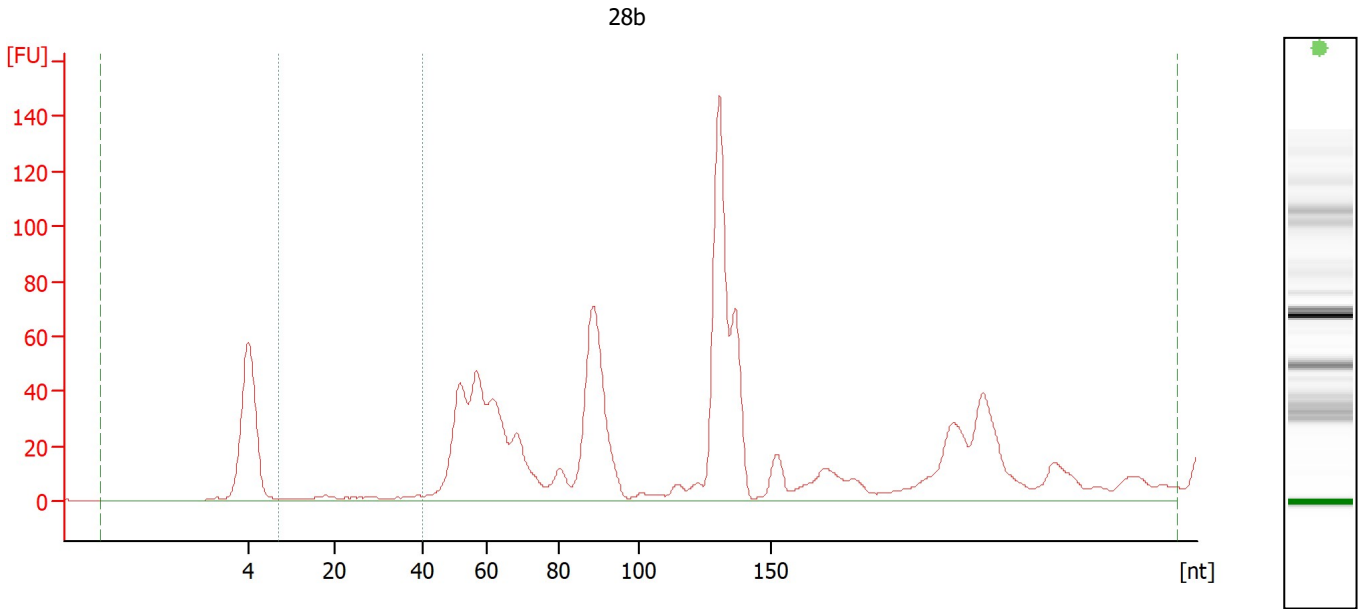
Region table for sample 6 : 28a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	300	129	53.7	10,006.8	100	
miRNA	10	40	25	35.9	1,168.8	12	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 28b

Small RNA Concentration [pg/μl]: 6,805.4
 miRNA Concentration [pg/μl]: 485.8
 miRNA / Small RNA Ratio [%]: 7

Result Flagging Color:
 Result Flagging Label: 7 % miRNA;
 Concentration: 485.80
 pg/μl

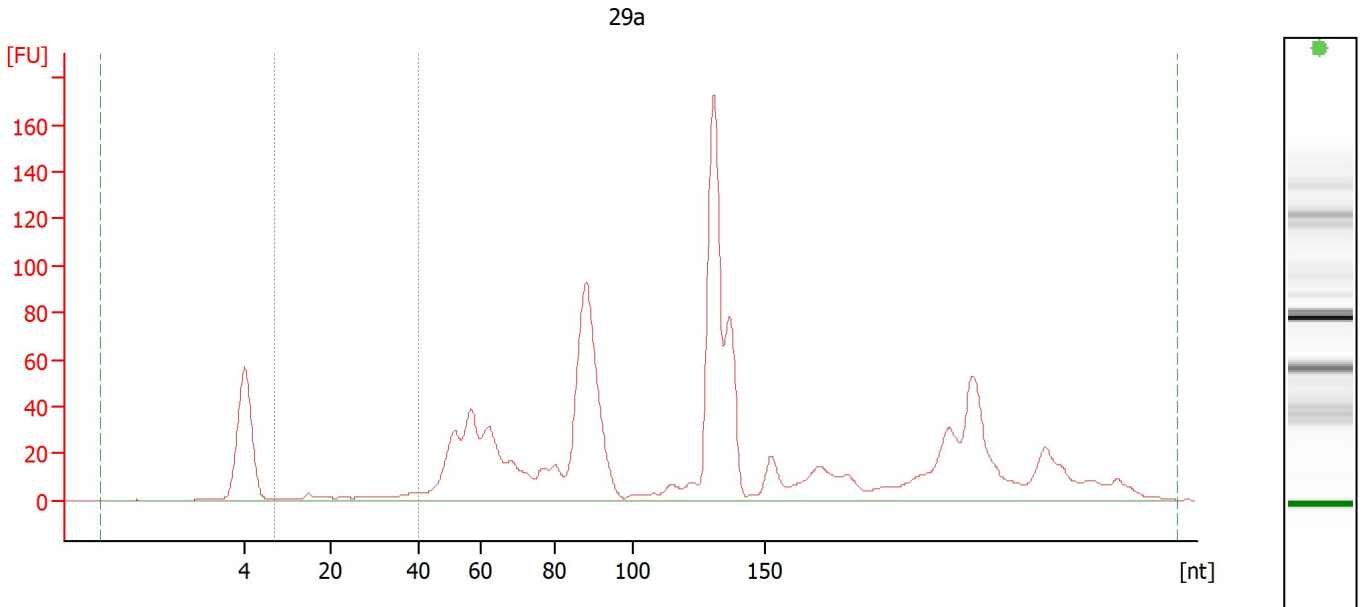
Region table for sample 7 : 28b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	304	128	60.3	6,805.4	100	
miRNA	10	40	25	34.6	485.8	7	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 29a

Small RNA Concentration [pg/μl]: 7,795.3
 miRNA Concentration [pg/μl]: 650.2
 miRNA / Small RNA Ratio [%]: 8

Result Flagging Color:
 Result Flagging Label: 8 % miRNA;
 Concentration: 650.20
 pg/μl

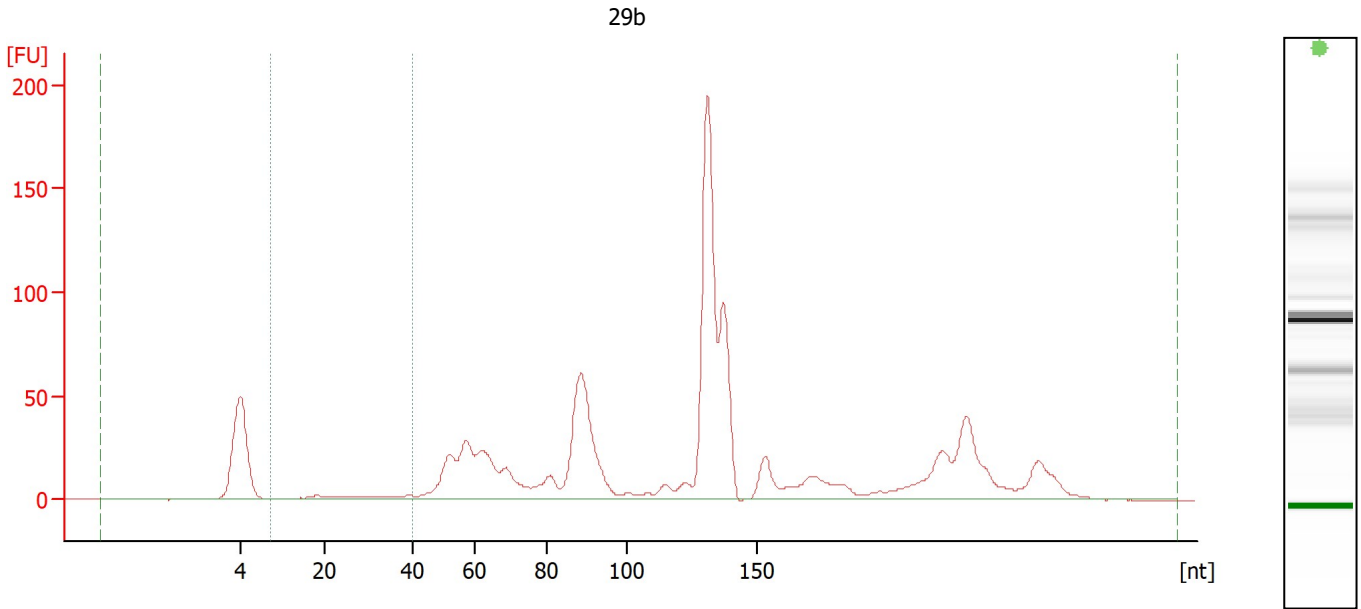
Region table for sample 8 : 29a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	307	133	56.7	7,795.3	100	
miRNA	10	40	26	34.6	650.2	8	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 29b

Small RNA Concentration [pg/μl]: 7,028.5
 miRNA Concentration [pg/μl]: 487.1
 miRNA / Small RNA Ratio [%]: 7

Result Flagging Color:
 Result Flagging Label: 7 % miRNA;
 Concentration: 487.10
 pg/μl

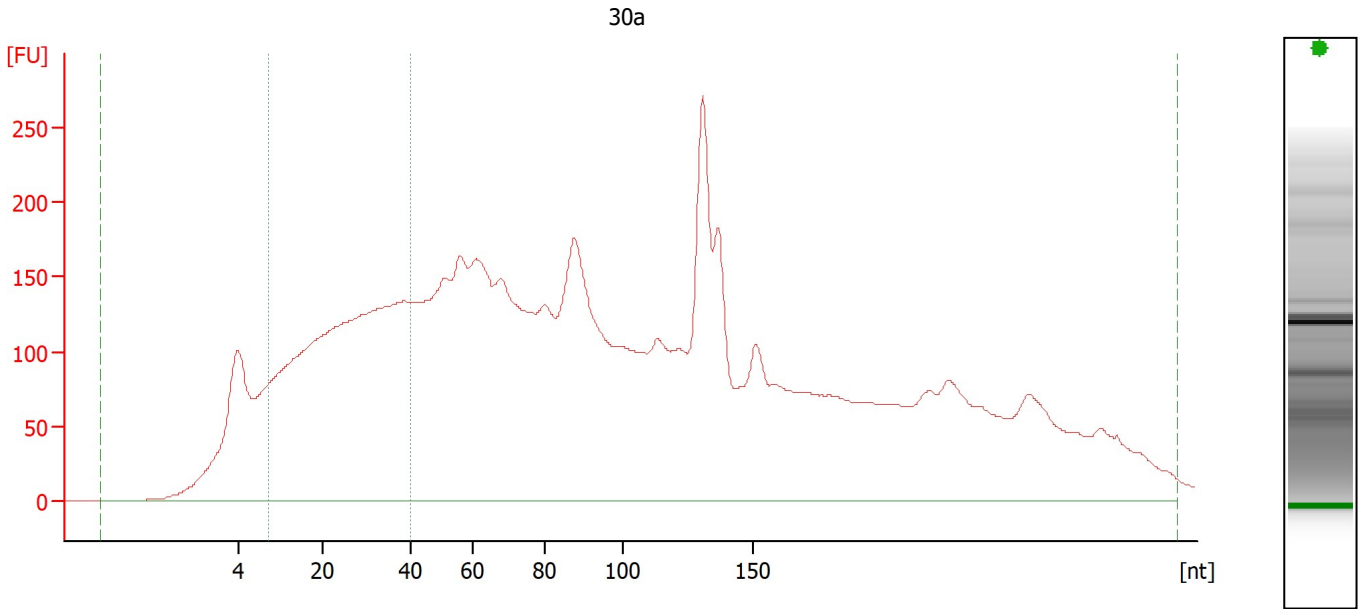
Region table for sample 9 : 29b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	311	129	52.9	7,028.5	100	
miRNA	10	40	26	33.6	487.1	7	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 30a

Small RNA Concentration [pg/μl]:	27,797.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	15,462.9	Result Flagging Label:	56 % miRNA; Concentration: 15462.80 pg/μl
miRNA / Small RNA Ratio [%]:	56		

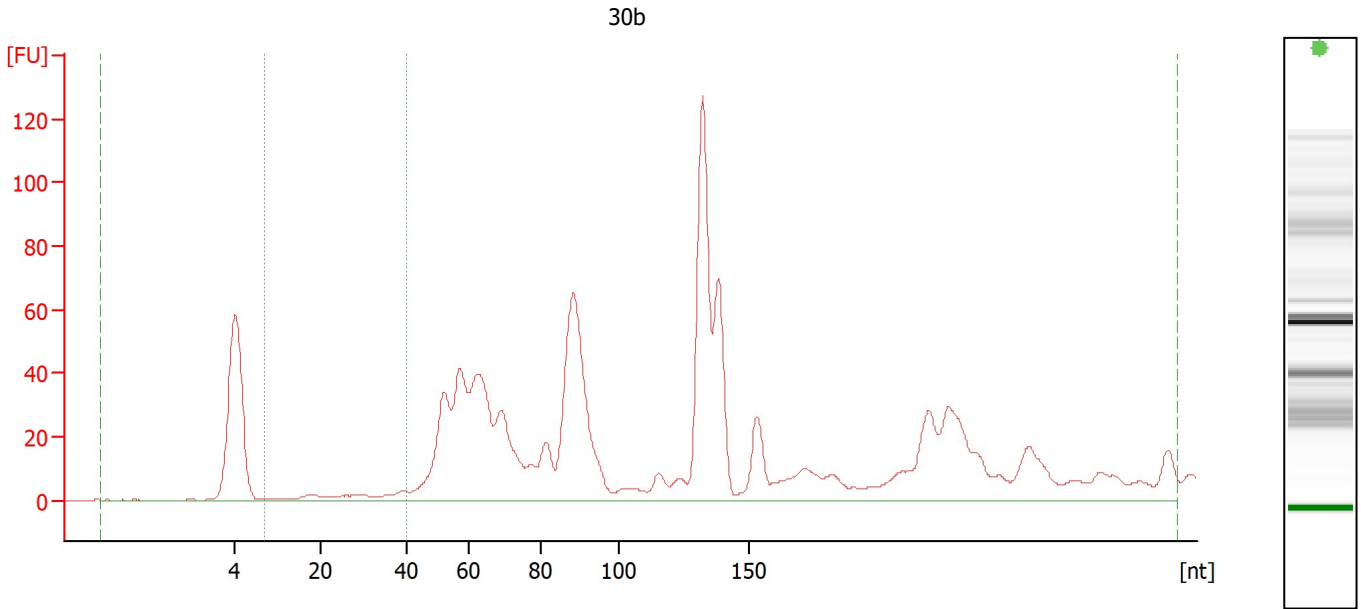
Region table for sample 10 : 30a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	313	110	72.3	27,797.4	100	
miRNA	10	40	25	34.7	15,462.8	56	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 30b

Small RNA Concentration [pg/μl]: 7,012.9
 miRNA Concentration [pg/μl]: 527.7
 miRNA / Small RNA Ratio [%]: 8

Result Flagging Color:
 Result Flagging Label: 8 % miRNA;
 Concentration: 527.70
 pg/μl

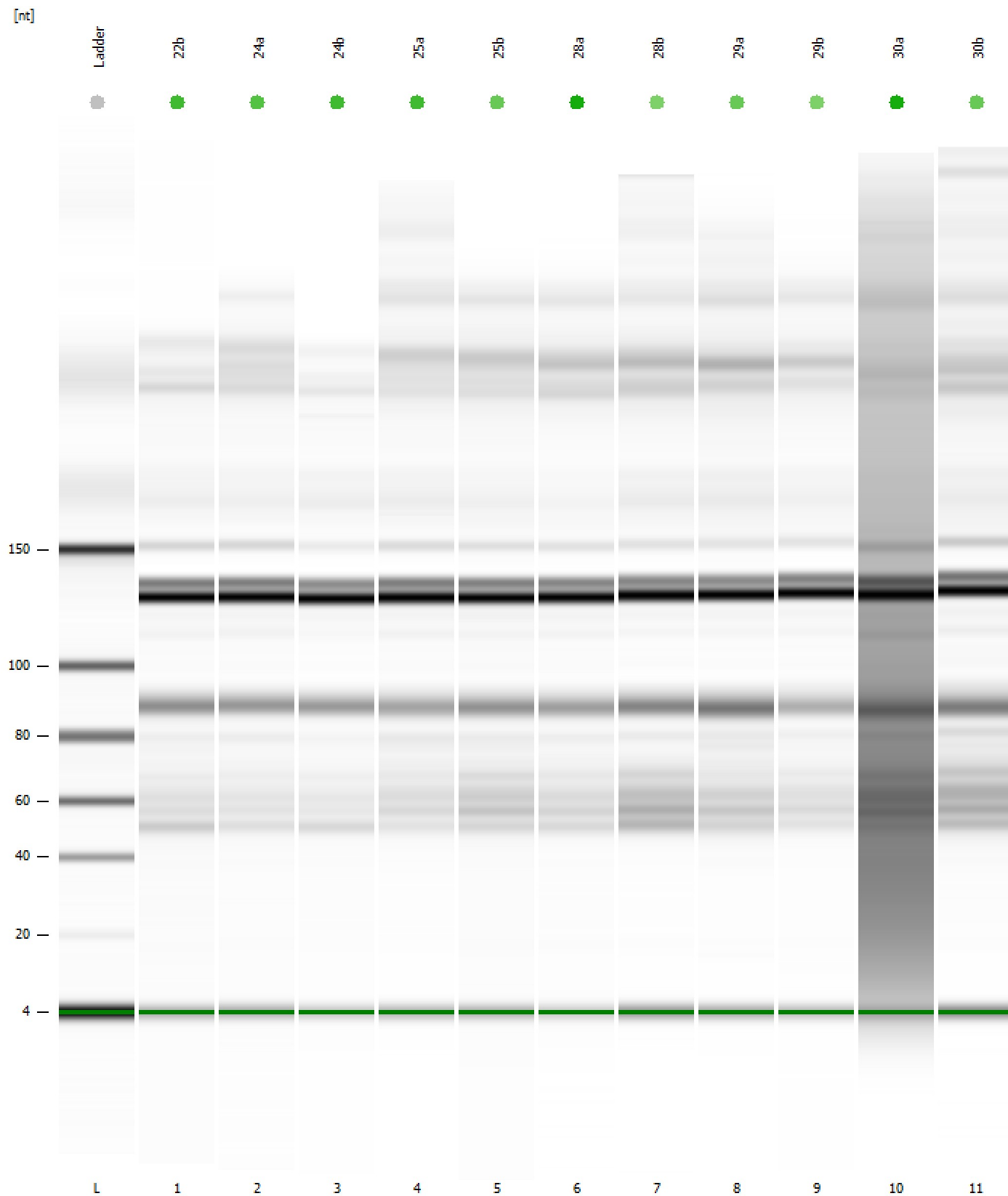
Region table for sample 11 : 30b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	315	132	61.1	7,012.9	100	
miRNA	10	40	28	28.7	527.7	8	

Assay Class: Small RNA
Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
Modified: 12/11/2019 1:19:52 PM

Gel Image

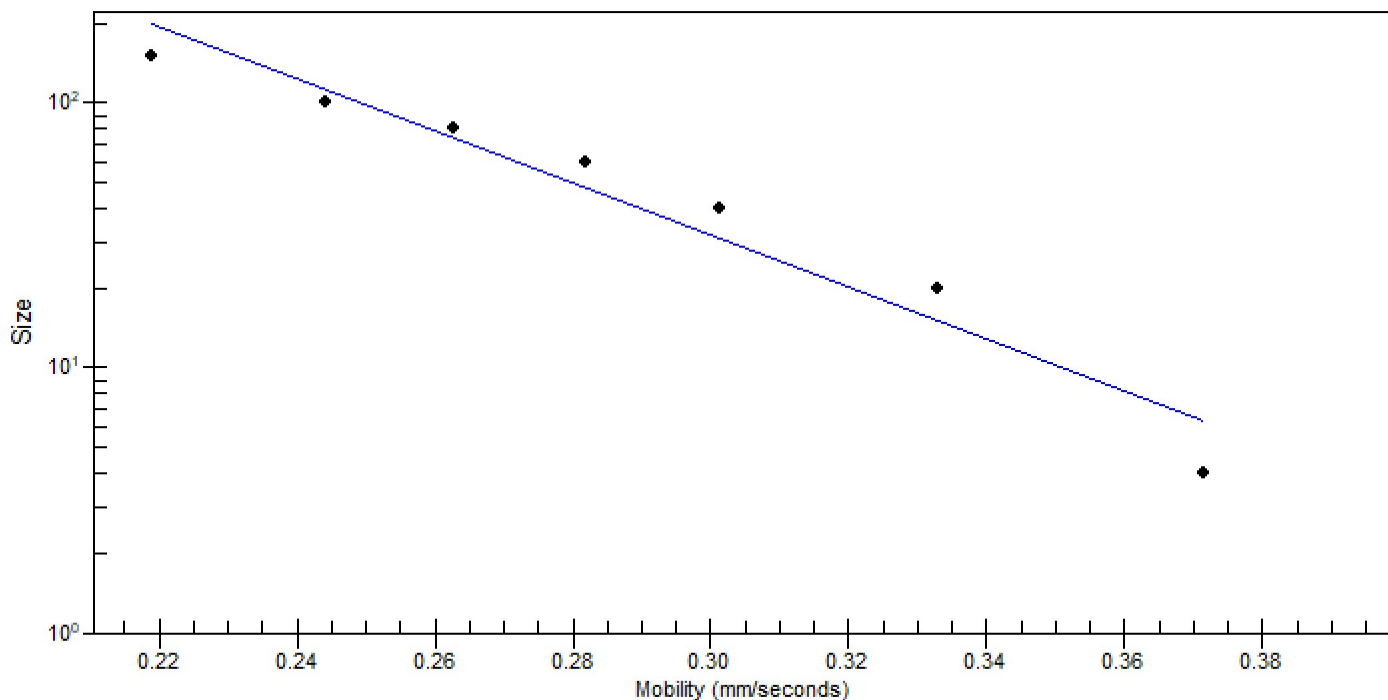


Assay Class: Small RNA
Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
Modified: 12/11/2019 1:19:52 PM

Curves

Standard Curve



Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_004.xad

Created: 12/11/2019 12:25:46 PM
 Modified: 12/11/2019 1:19:52 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		12/11/2019 12:56:29 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-12-11\Bioanalyze r1_Small RNA_2019-12-11_004.xad)		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		12/11/2019 12:25:51 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB