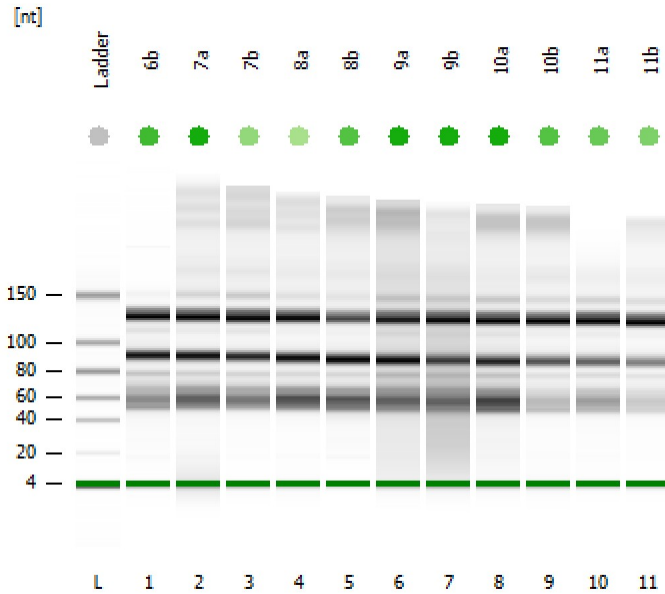


Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electrophoresis File Run Summary



Instrument Information:

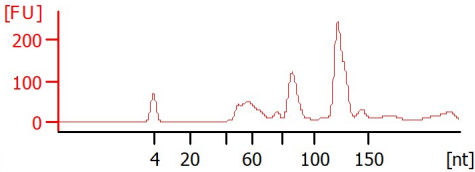
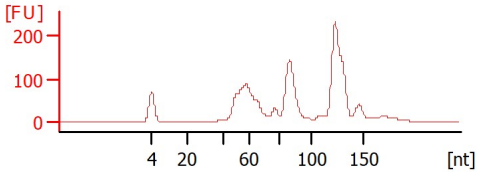
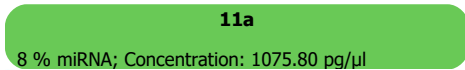
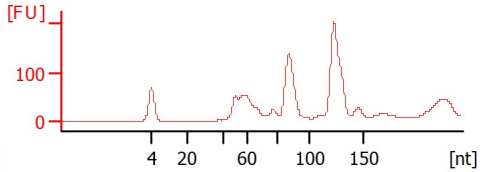
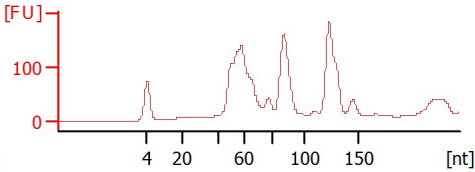
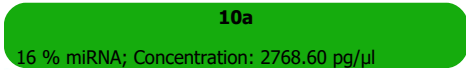
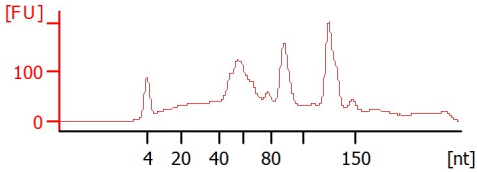
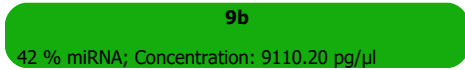
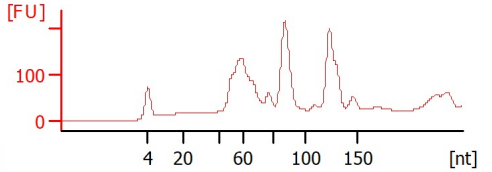
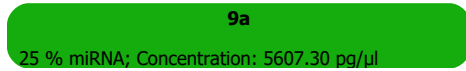
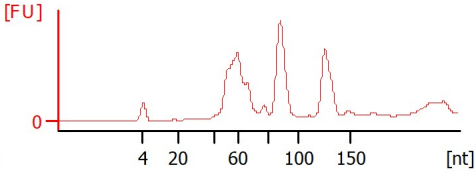
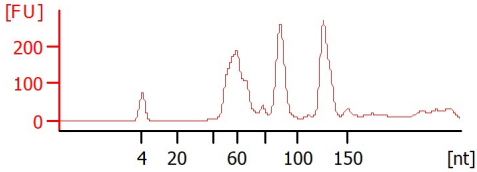
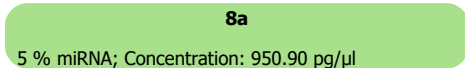
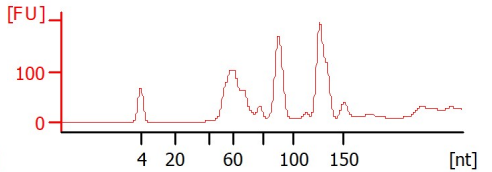
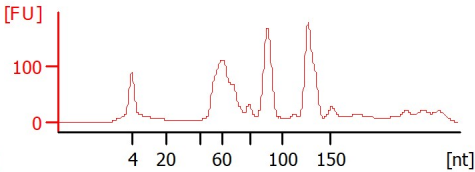
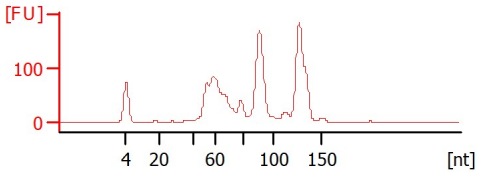
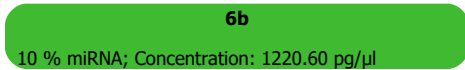
Instrument Name: DE34903152 Firmware: C.01.069
 Serial#: DE34903152 Type: G2938C

Assay Information:

Assay Origin Path: C:\Program Files (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
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Chip Information:













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



Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
6b		✓	10 % miRNA; Concentration: 1220.60 pg/μl	
7a		✓	12 % miRNA; Concentration: 828.80 pg/μl	
7b		✓	6 % miRNA; Concentration: 886.40 pg/μl	
8a		✓	5 % miRNA; Concentration: 950.90 pg/μl	
8b		✓	9 % miRNA; Concentration: 3108.90 pg/μl	
9a		✓	25 % miRNA; Concentration: 5607.30 pg/μl	
9b		✓	42 % miRNA; Concentration: 9110.20 pg/μl	
10a		✓	16 % miRNA; Concentration: 2768.60 pg/μl	
10b		✓	9 % miRNA; Concentration: 1047.20 pg/μl	
11a		✓	8 % miRNA; Concentration: 1075.80 pg/μl	
11b		✓	7 % miRNA; Concentration: 857.40 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_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

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

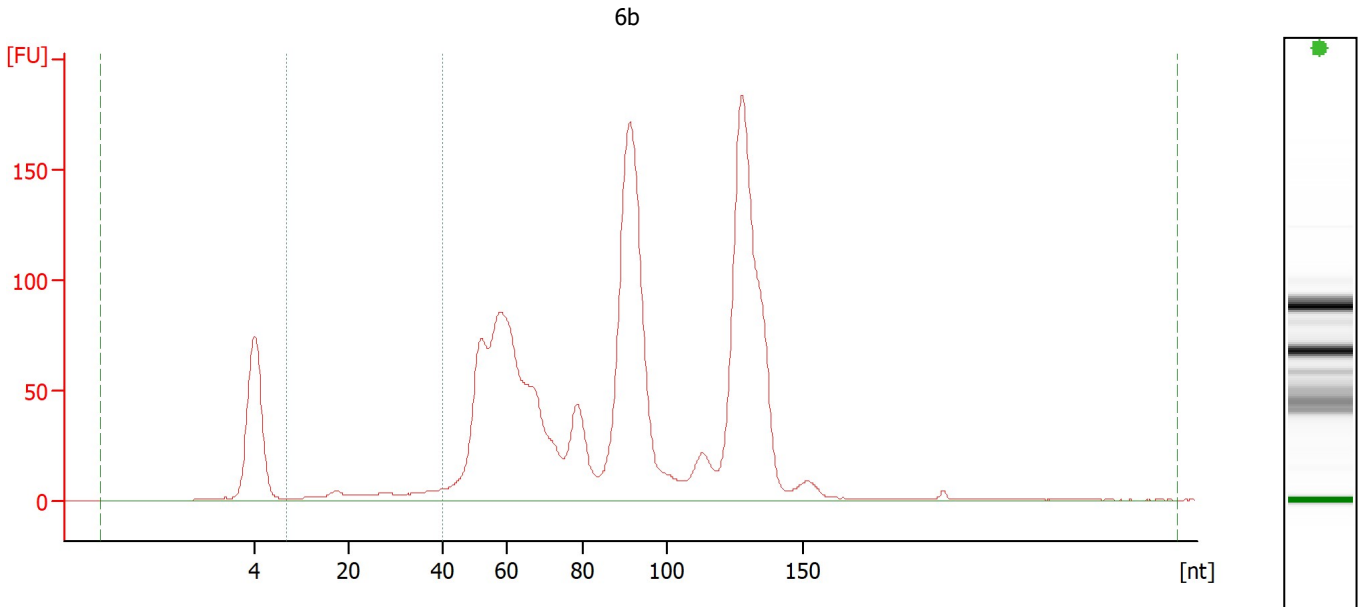
Ladder

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_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary



Overall Results for sample 1 : 6b

Small RNA Concentration [pg/μl]:	12,261.7	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,220.6	Result Flagging Label:	10 % miRNA; Concentration: 1220.60 pg/μl
miRNA / Small RNA Ratio [%]:	10		

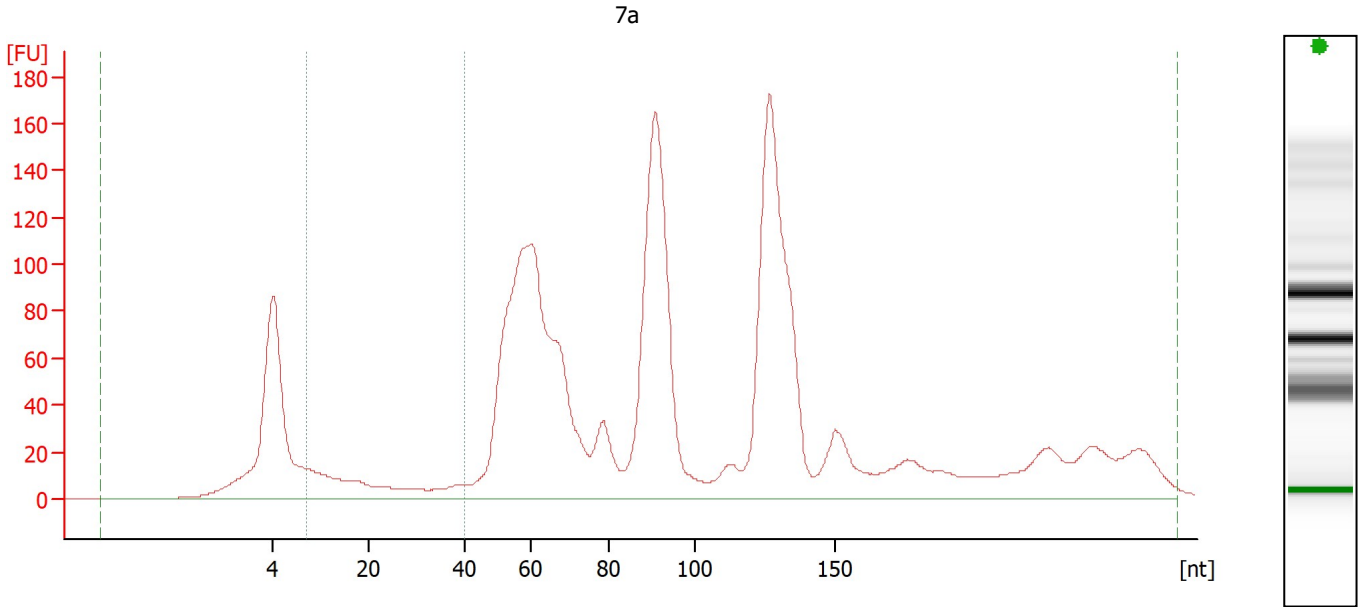
Region table for sample 1 : 6b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	287	88	46.0	12,261.7	100	
miRNA	10	40	27	32.3	1,220.6	10	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 7a

Small RNA Concentration [pg/μl]: 7,186.7
 miRNA Concentration [pg/μl]: 828.8
 miRNA / Small RNA Ratio [%]: 12

Result Flagging Color:
 Result Flagging Label: 12 % miRNA;
 Concentration: 828.80
 pg/μl

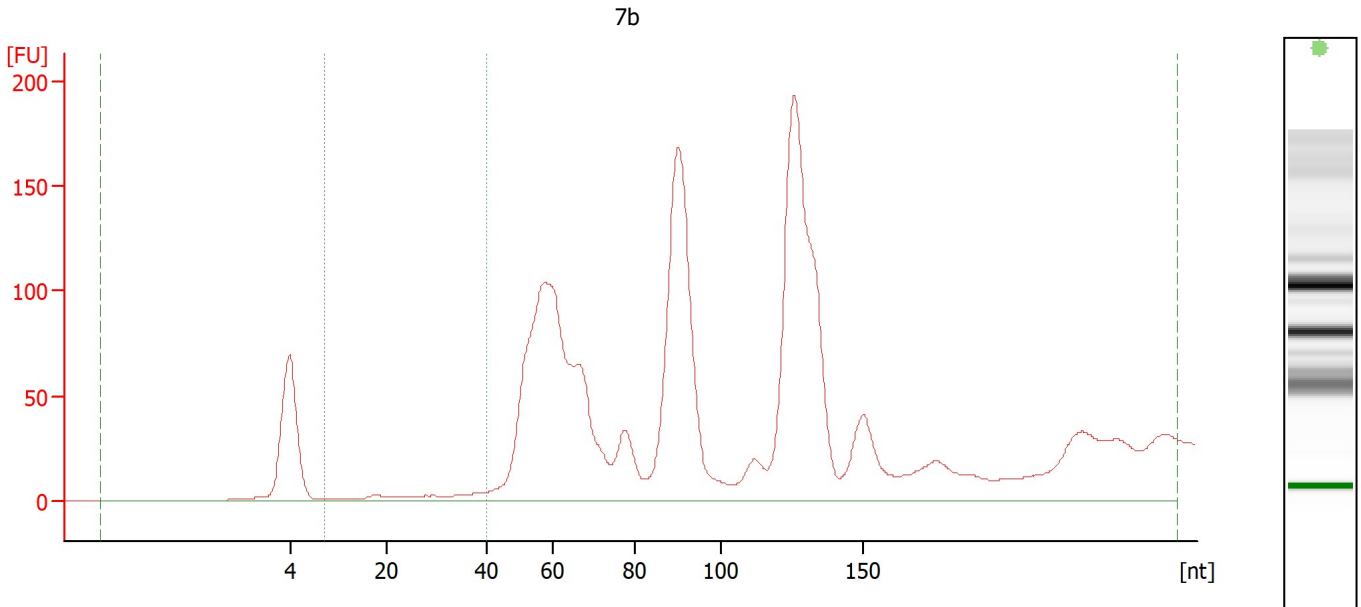
Region table for sample 2 : 7a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	273	104	63.0	7,186.7	100	
miRNA	10	40	21	43.5	828.8	12	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 7b

Small RNA Concentration [pg/μl]: 15,248.2
 miRNA Concentration [pg/μl]: 886.4
 miRNA / Small RNA Ratio [%]: 6

Result Flagging Color:
 Result Flagging Label: 6 % miRNA;
 Concentration: 886.40
 pg/μl

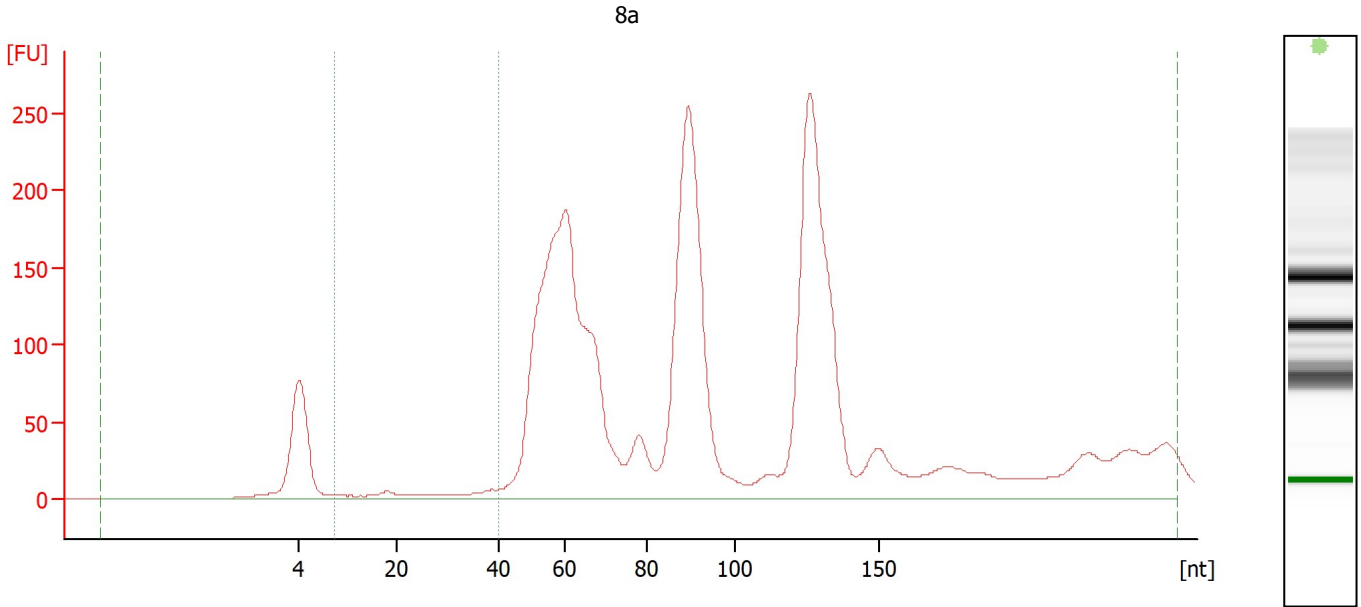
Region table for sample 3 : 7b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	260	116	54.6	15,248.2	100	
miRNA	10	40	27	31.6	886.4	6	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 8a

Small RNA Concentration [pg/μl]: 18,051.2
 miRNA Concentration [pg/μl]: 950.9
 miRNA / Small RNA Ratio [%]: 5

Result Flagging Color:
 Result Flagging Label: 5 % miRNA;
 Concentration: 950.90
 pg/μl

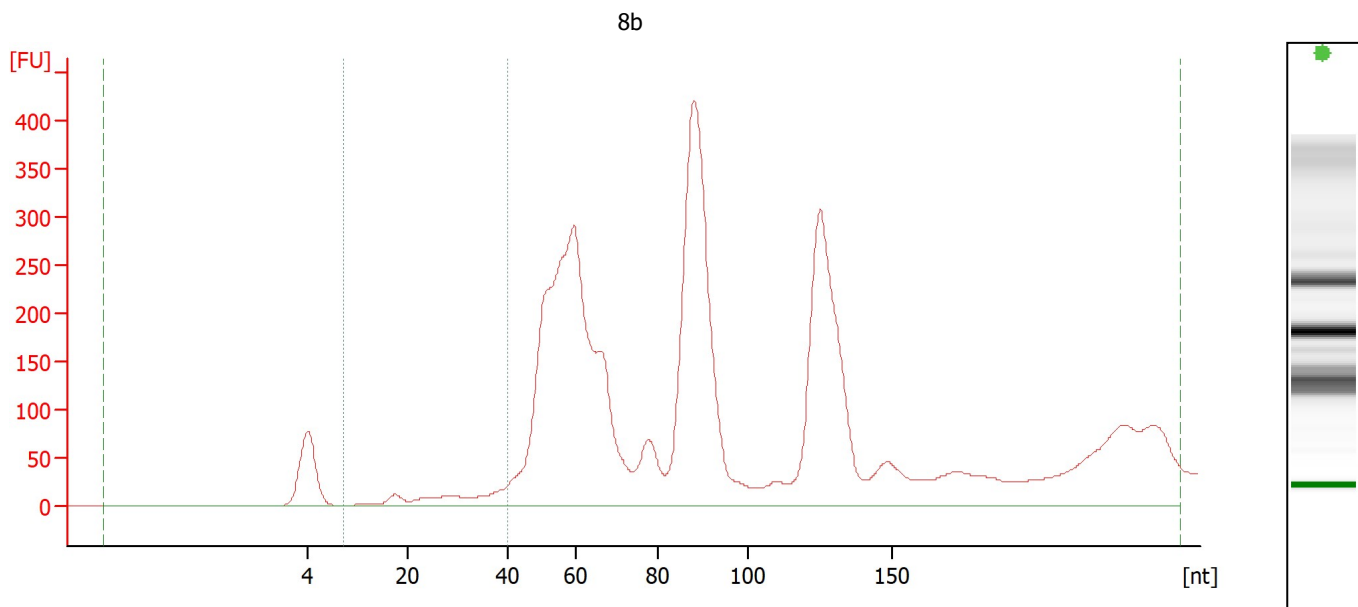
Region table for sample 4 : 8a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	253	105	54.4	18,051.2	100	
miRNA	10	40	26	35.7	950.9	5	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 8b

Small RNA Concentration [pg/μl]: 33,343.1
 miRNA Concentration [pg/μl]: 3,108.9
 miRNA / Small RNA Ratio [%]: 9

Result Flagging Color:
 Result Flagging Label: 9 % miRNA;
 Concentration: 3108.90 pg/μl

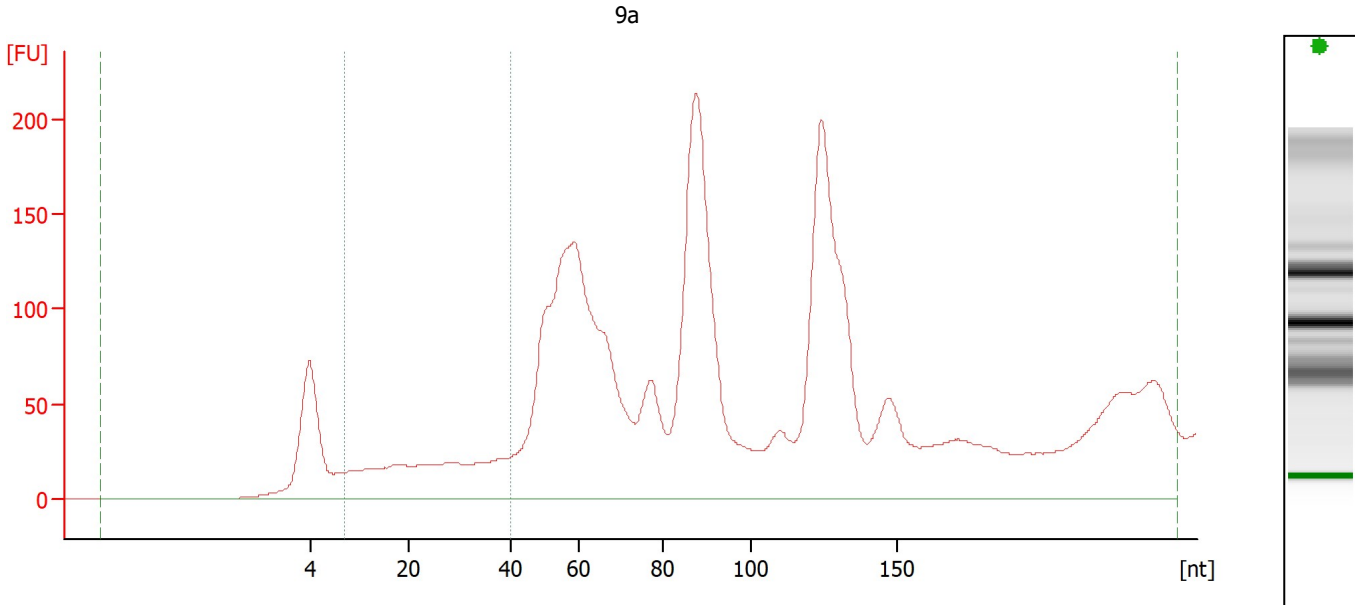
Region table for sample 5 : 8b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	249	109	55.7	33,343.1	100	
miRNA	10	40	28	27.5	3,108.9	9	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 9a

Small RNA Concentration [pg/μl]:	22,095.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	5,607.3	Result Flagging Label:	25 % miRNA; Concentration: 5607.30 pg/μl
miRNA / Small RNA Ratio [%]:	25		

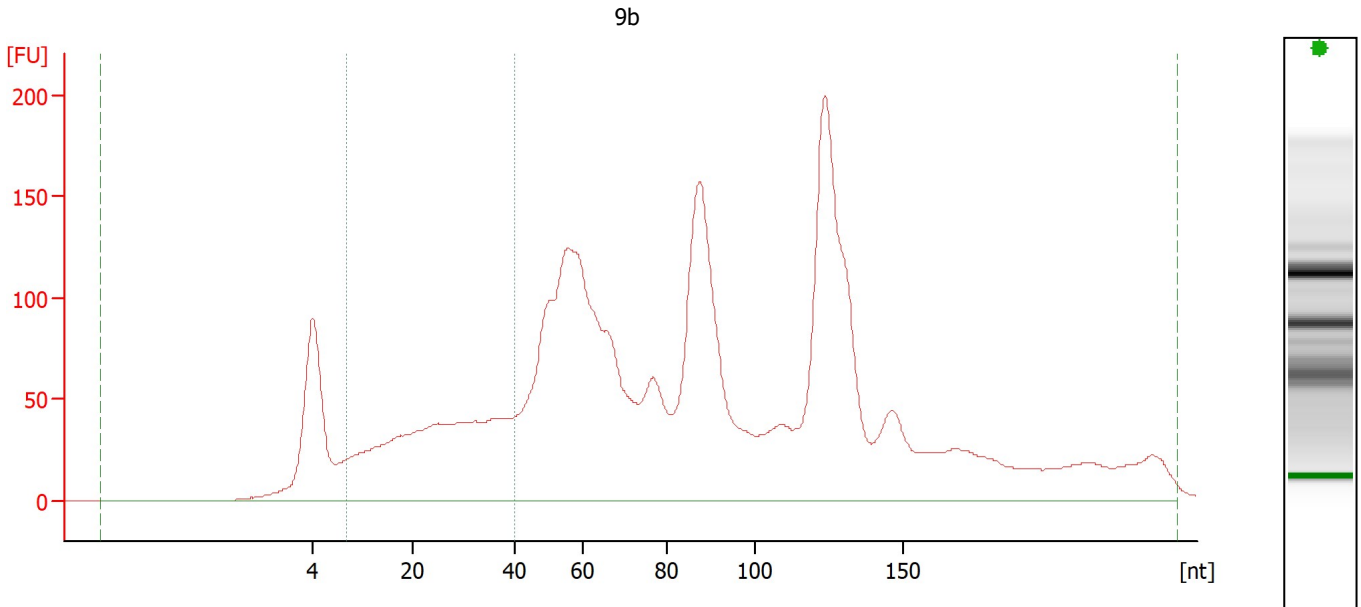
Region table for sample 6 : 9a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	245	108	58.5	22,095.4	100	
miRNA	10	40	25	35.8	5,607.3	25	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 9b

Small RNA Concentration [pg/μl]:	21,639.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	9,110.2	Result Flagging Label:	42 % miRNA; Concentration: 9110.20 pg/μl
miRNA / Small RNA Ratio [%]:	42		

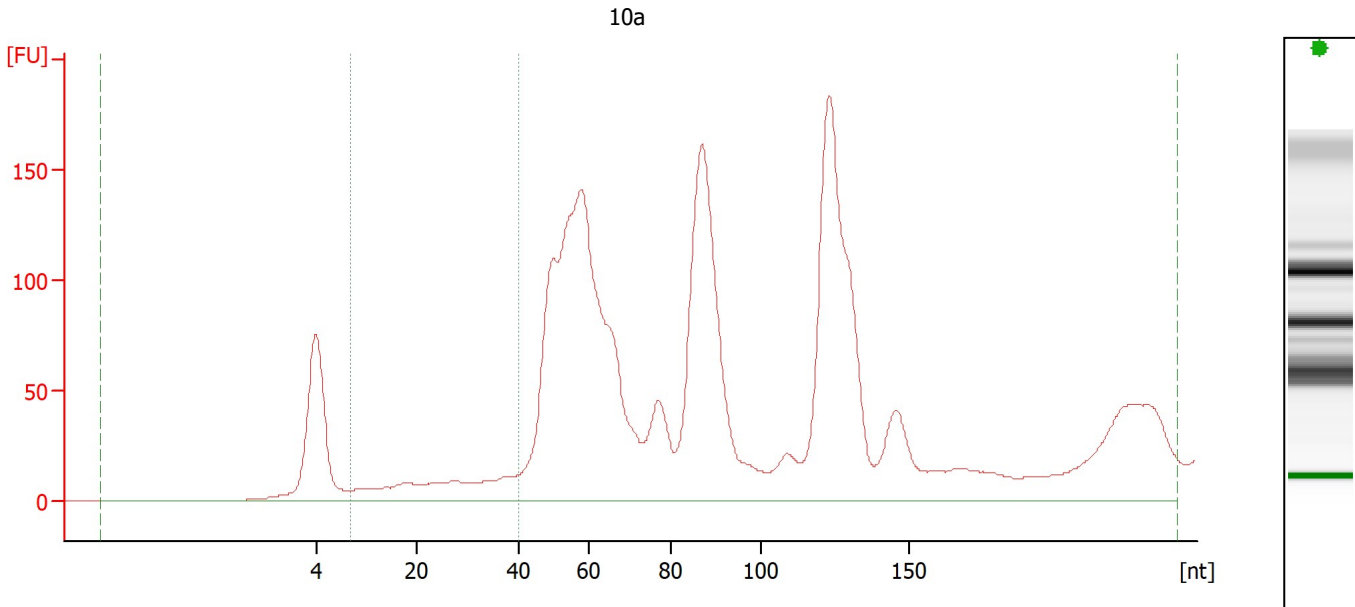
Region table for sample 7 : 9b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	243	89	61.8	21,639.9	100	
miRNA	10	40	25	34.0	9,110.2	42	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 10a

Small RNA Concentration [pg/μl]:	17,239.7	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,768.6	Result Flagging Label:	16 % miRNA; Concentration: 2768.60 pg/μl
miRNA / Small RNA Ratio [%]:	16		

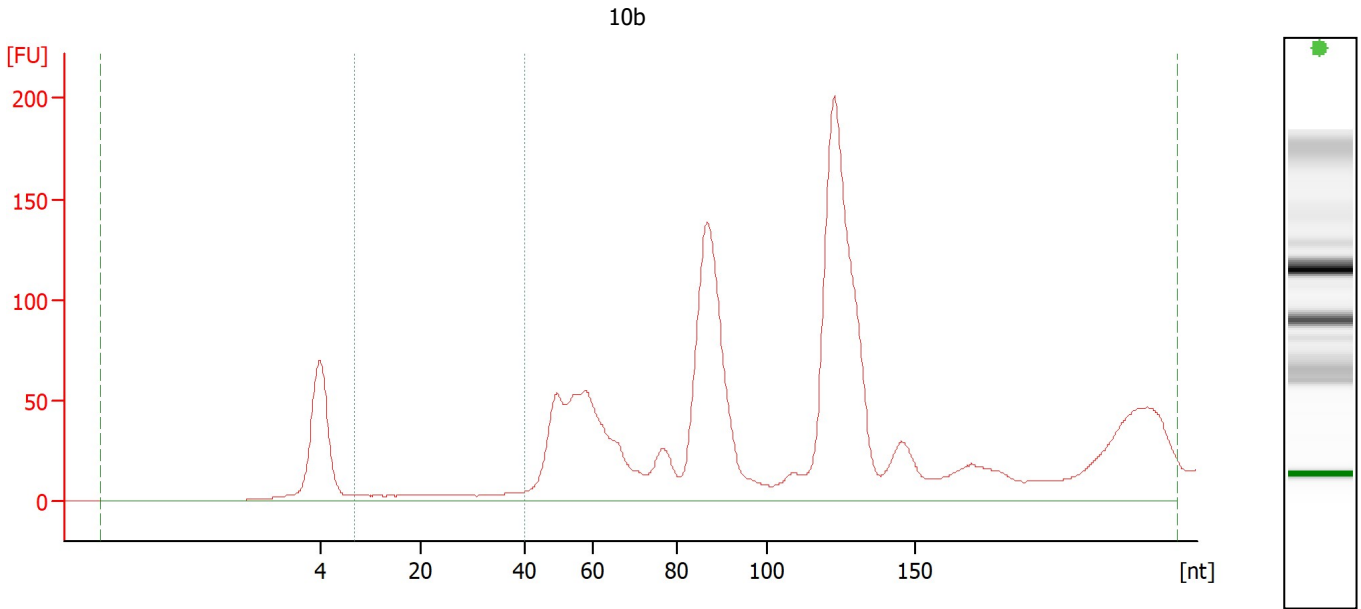
Region table for sample 8 : 10a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	241	101	58.3	17,239.7	100	
miRNA	10	40	26	34.3	2,768.6	16	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 10b

Small RNA Concentration [pg/μl]: 11,631.6
 miRNA Concentration [pg/μl]: 1,047.2
 miRNA / Small RNA Ratio [%]: 9

Result Flagging Color:
 Result Flagging Label: 9 % miRNA;
 Concentration: 1047.20 pg/μl

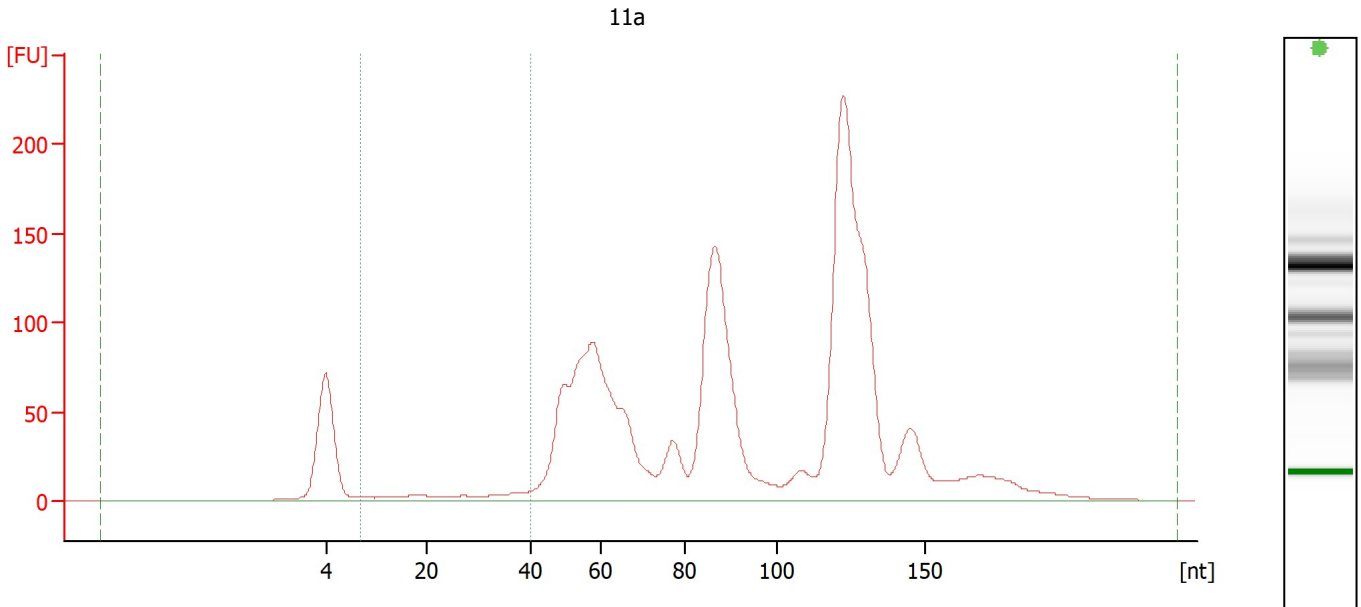
Region table for sample 9 : 10b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	238	114	53.0	11,631.6	100	
miRNA	10	40	25	36.8	1,047.2	9	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 11a

Small RNA Concentration [pg/μl]: 13,504.0
 miRNA Concentration [pg/μl]: 1,075.8
 miRNA / Small RNA Ratio [%]: 8

Result Flagging Color:
 Result Flagging Label: 8 % miRNA;
 Concentration:
 1075.80 pg/μl

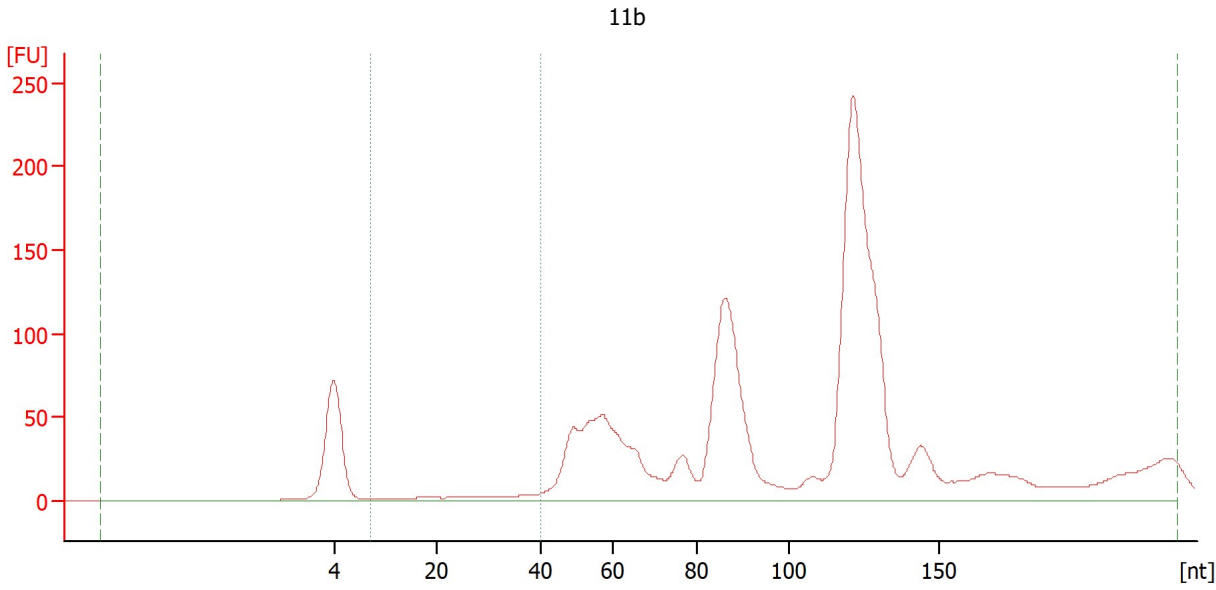
Region table for sample 10 : 11a

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	234	94	44.5	13,504.0	100	
miRNA	10	40	26	34.4	1,075.8	8	

Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 11b

Small RNA Concentration [pg/μl]: 11,743.0
 miRNA Concentration [pg/μl]: 857.4
 miRNA / Small RNA Ratio [%]: 7

Result Flagging Color:
 Result Flagging Label: 7 % miRNA;
 Concentration: 857.40
 pg/μl

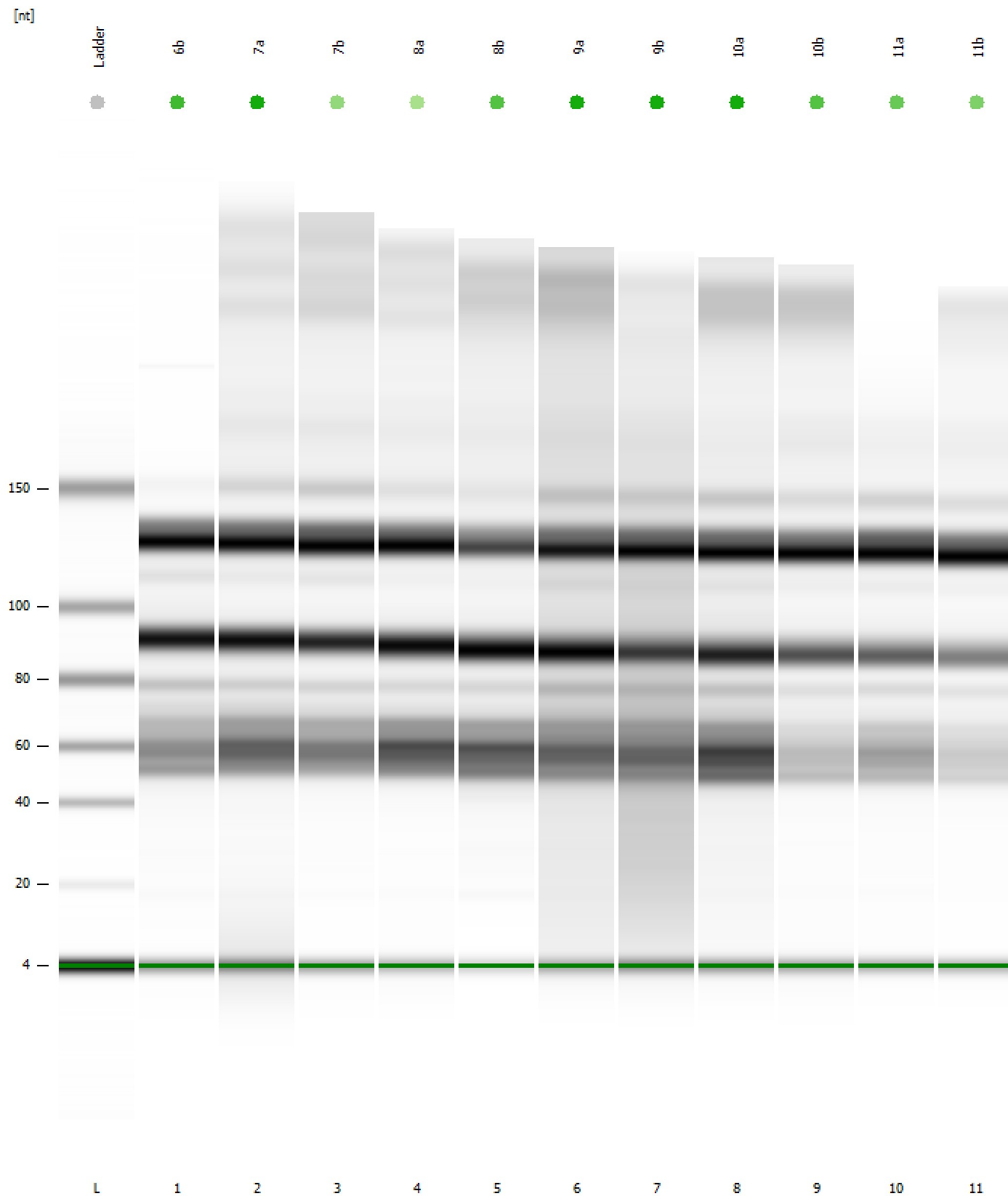
Region table for sample 11 : 11b

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	228	106	47.7	11,743.0	100	
miRNA	10	40	27	32.6	857.4	7	

Assay Class: Small RNA
Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
Modified: 12/11/2019 11:17:18 AM

Gel Image

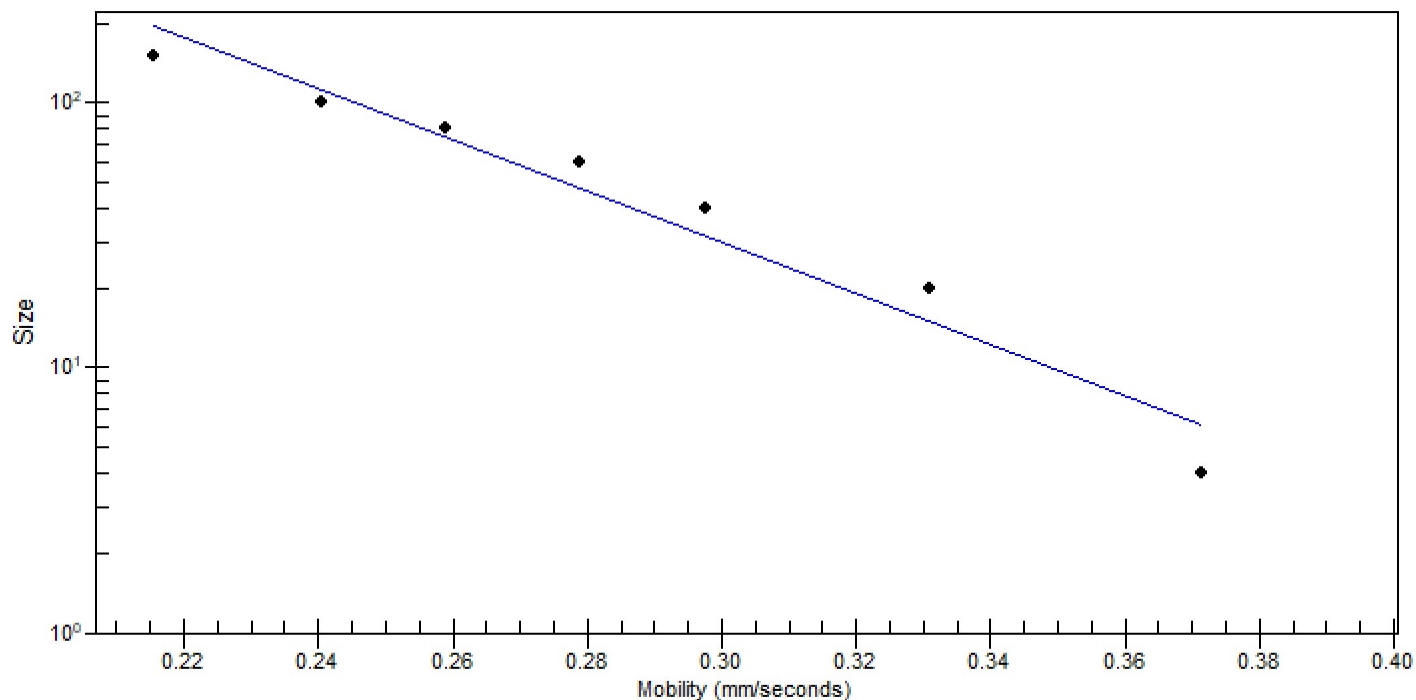


Assay Class: Small RNA
Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
Modified: 12/11/2019 11:17:18 AM

Curves

Standard Curve



Assay Class: Small RNA
 Data Path: Z:\XADs\2019-12-11\Bioanalyzer1_Small RNA_2019-12-11_002.xad

Created: 12/11/2019 10:22:22 AM
 Modified: 12/11/2019 11:17:18 AM

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 10:53:05 AM	(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_002.xad)		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		12/11/2019 10:22:27 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB