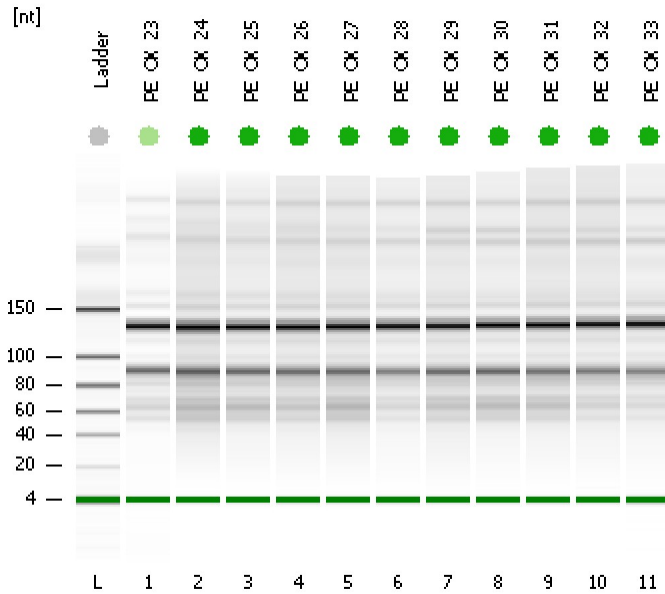


Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
Modified: 8/6/2019 10:30:23 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\Small RNA Series II.xsy

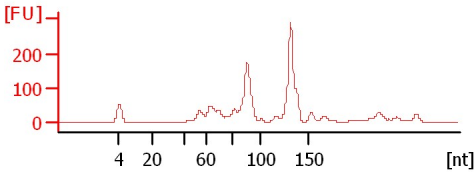
Assay Class: Small RNA
Version: 1.2
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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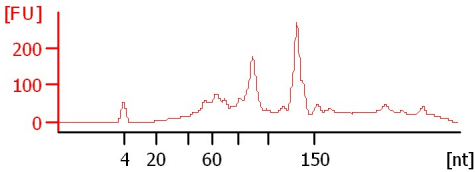
Chip Information:

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

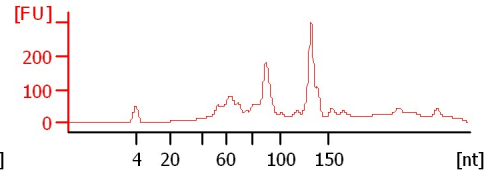
PE_OX_23
5 % miRNA; Concentration: 595.90 pg/µl



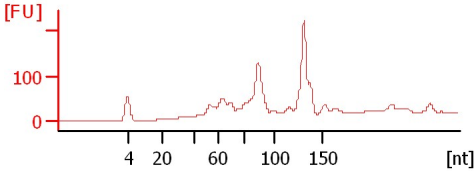
PE_OX_24
18 % miRNA; Concentration: 4619.50 pg/µl



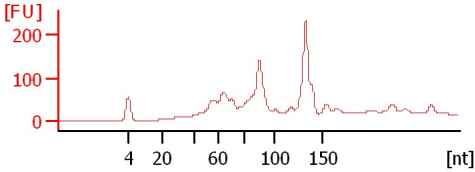
PE_OX_25
17 % miRNA; Concentration: 3934.80 pg/µl



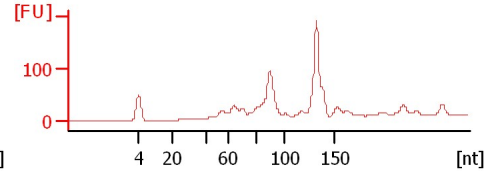
PE_OX_26
18 % miRNA; Concentration: 3150 pg/µl



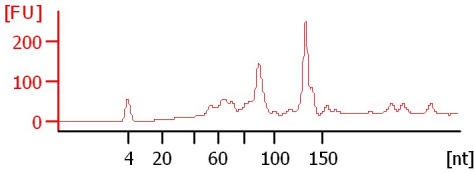
PE_OX_27
19 % miRNA; Concentration: 3604.20 pg/µl



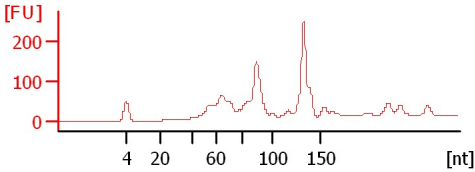
PE_OX_28
16 % miRNA; Concentration: 2000.20 pg/µl



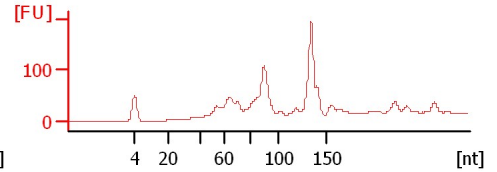
PE_OX_29
21 % miRNA; Concentration: 4019.40 pg/µl



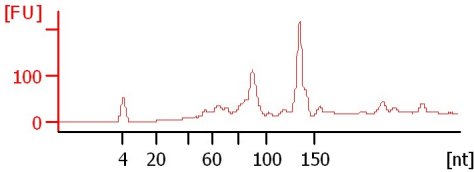
PE_OX_30
15 % miRNA; Concentration: 2849.10 pg/µl



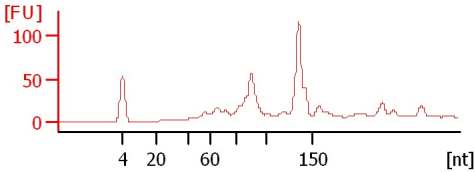
PE_OX_31
17 % miRNA; Concentration: 2767.40 pg/µl



PE_OX_32
17 % miRNA; Concentration: 2646.30 pg/µl















PE_OX_33
16 % miRNA; Concentration: 1127.90 pg/µl



Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
PE_OX_23		✓	5 % miRNA; Concentration: 595.90 pg/μl	
PE_OX_24		✓	18 % miRNA; Concentration: 4619.50 pg/μl	
PE_OX_25		✓	17 % miRNA; Concentration: 3934.80 pg/μl	
PE_OX_26		✓	18 % miRNA; Concentration: 3150 pg/μl	
PE_OX_27		✓	19 % miRNA; Concentration: 3604.20 pg/μl	
PE_OX_28		✓	16 % miRNA; Concentration: 2000.20 pg/μl	
PE_OX_29		✓	21 % miRNA; Concentration: 4019.40 pg/μl	
PE_OX_30		✓	15 % miRNA; Concentration: 2849.10 pg/μl	
PE_OX_31		✓	17 % miRNA; Concentration: 2767.40 pg/μl	
PE_OX_32		✓	17 % miRNA; Concentration: 2646.30 pg/μl	
PE_OX_33		✓	16 % miRNA; Concentration: 1127.90 pg/μl	
Ladder		✓	Number of Peaks: 6	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
Modified: 8/6/2019 10:30:23 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

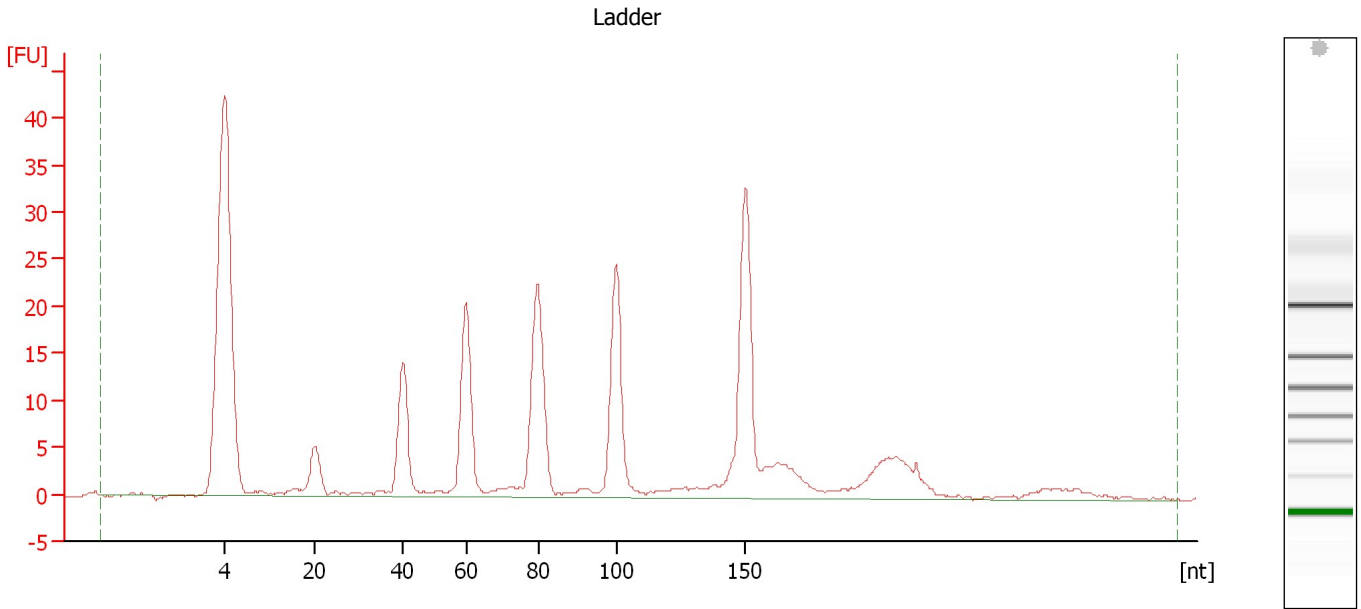
Ladder

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

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

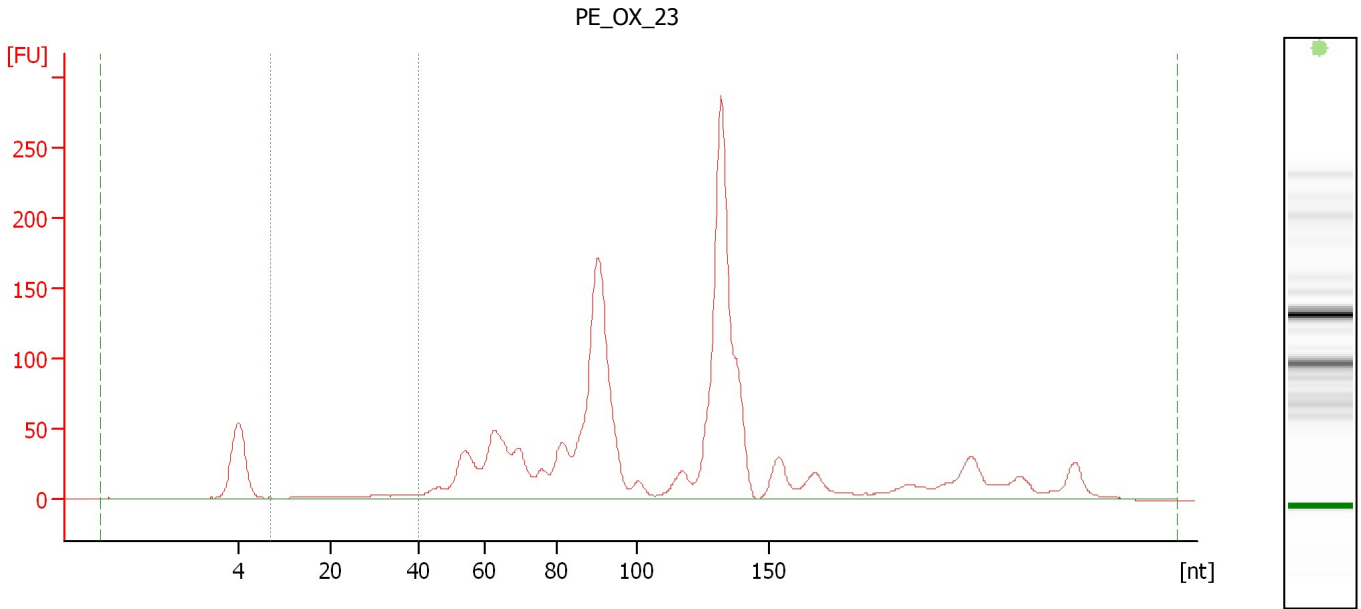
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : PE_OX_23

Small RNA Concentration [pg/μl]:	12,183.2	Result Flagging Color:	
miRNA Concentration [pg/μl]:	595.9	Result Flagging Label:	5 % miRNA; Concentration: 595.90 pg/μl
miRNA / Small RNA Ratio [%]:	5		

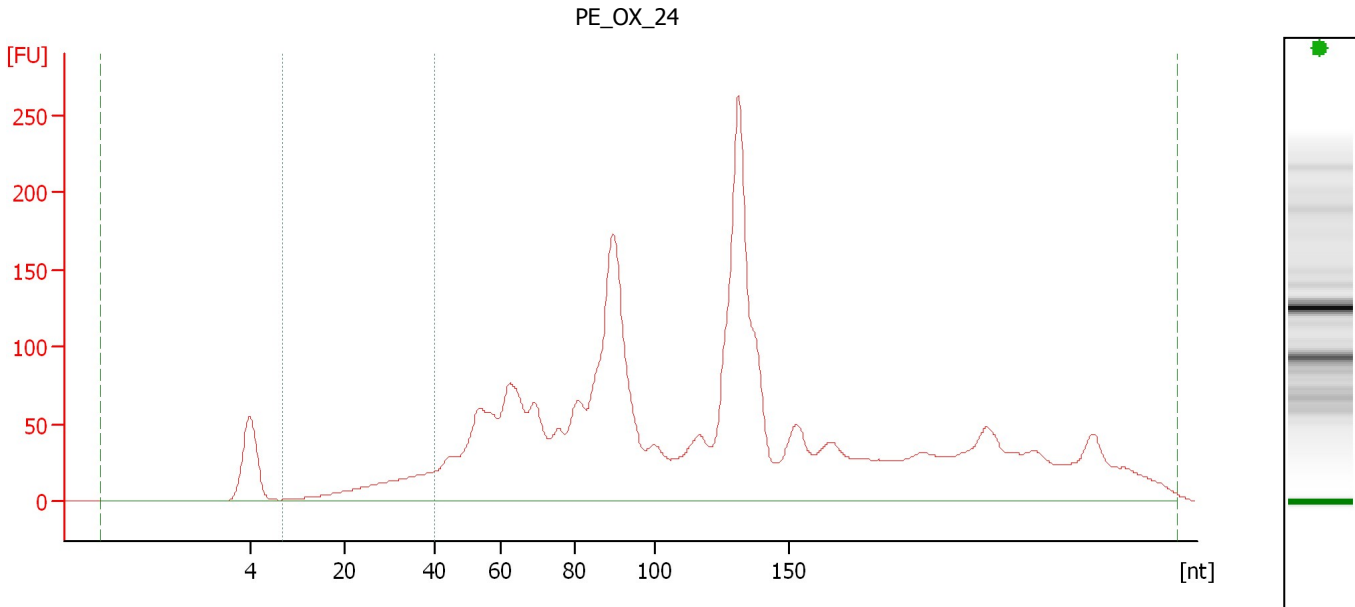
Region table for sample 1 : PE_OX_23

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	305	117	49.3	12,183.2	100	
miRNA	10	40	29	24.5	595.9	5	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PE_OX_24

Small RNA Concentration [pg/μl]:	25,385.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	4,619.5	Result Flagging Label:	18 % miRNA; Concentration: 4619.50 pg/μl
miRNA / Small RNA Ratio [%]:	18		

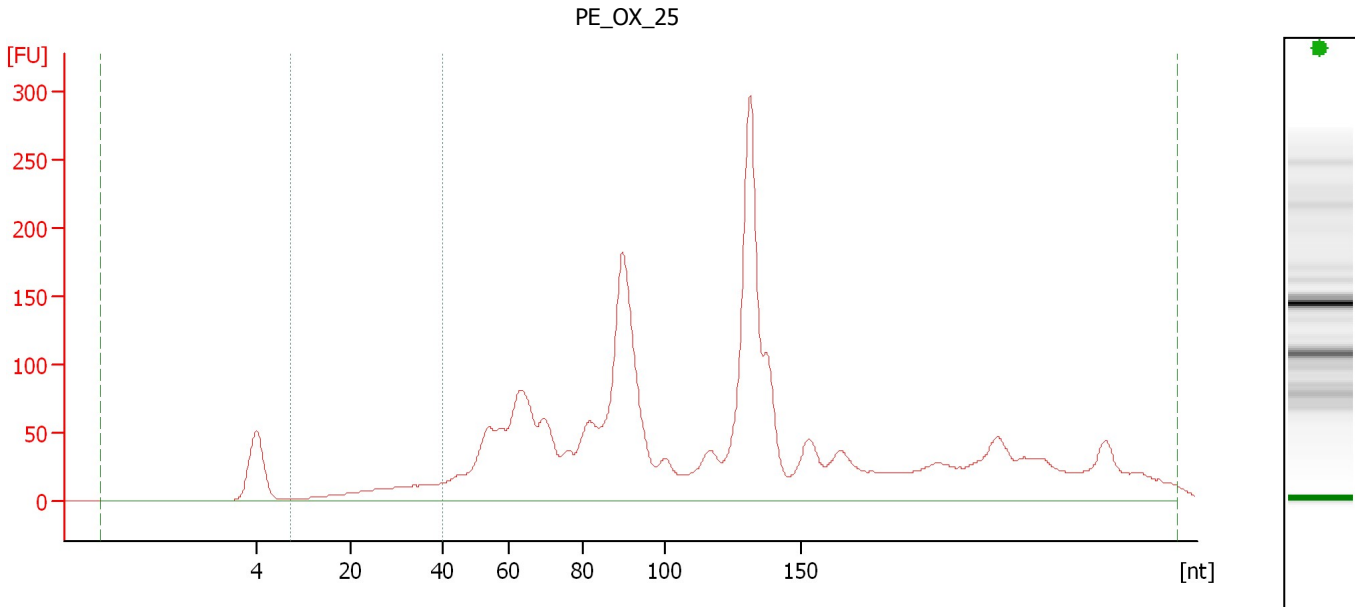
Region table for sample 2 : PE_OX_24

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	295	129	53.3	25,385.5	100	
miRNA	10	40	30	25.1	4,619.5	18	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : PE_OX_25

Small RNA Concentration [pg/μl]:	23,559.2	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,934.8	Result Flagging Label:	17 % miRNA; Concentration: 3934.80 pg/μl
miRNA / Small RNA Ratio [%]:	17		

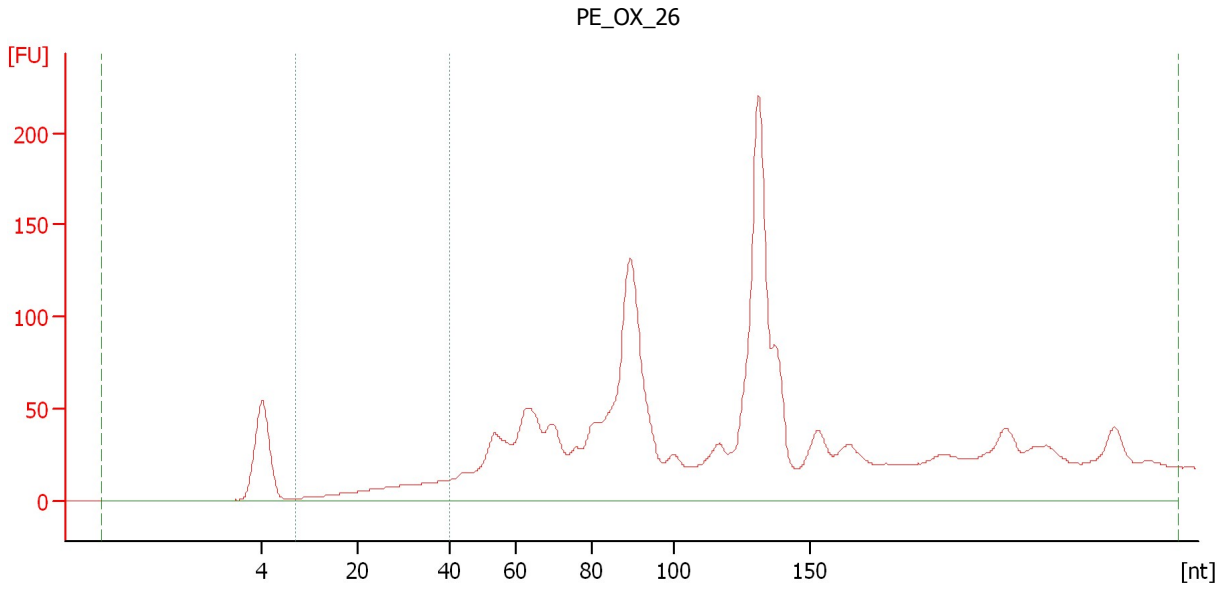
Region table for sample 3 : PE_OX_25

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	289	129	53.1	23,559.2	100	
miRNA	10	40	28	28.2	3,934.8	17	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PE_OX_26

Small RNA Concentration [pg/μl]:	17,334.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,150.0	Result Flagging Label:	18 % miRNA; Concentration: 3150 pg/μl
miRNA / Small RNA Ratio [%]:	18		

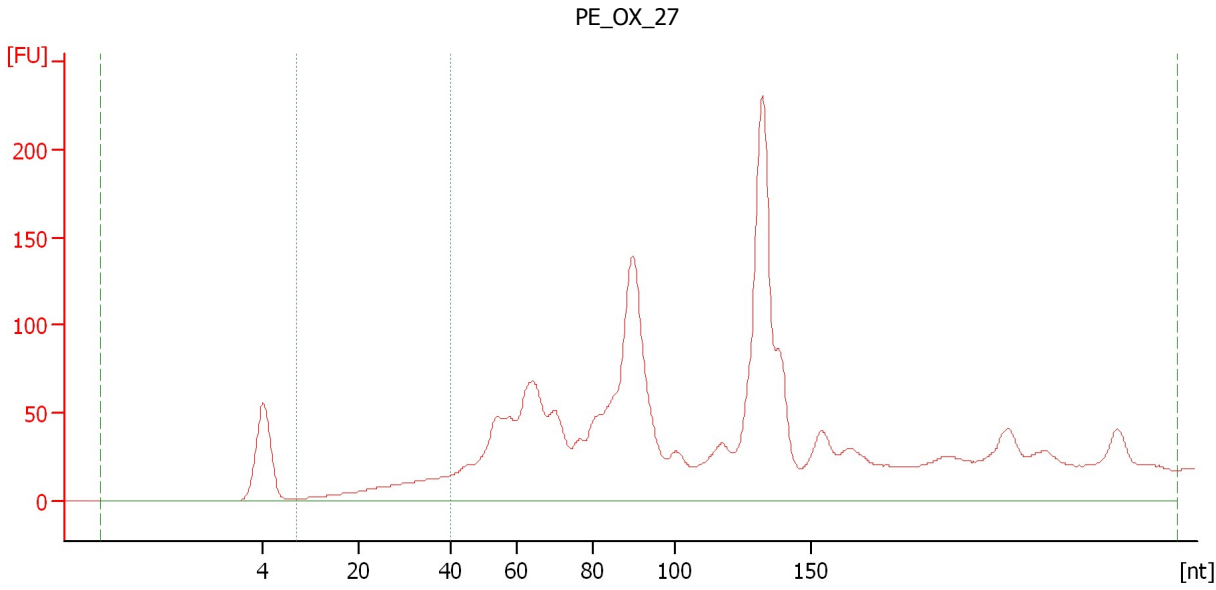
Region table for sample 4 : PE_OX_26

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	286	133	53.2	17,334.9	100	
miRNA	10	40	28	28.7	3,150.0	18	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : PE_OX_27

Small RNA Concentration [pg/μl]:	19,397.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,604.2	Result Flagging Label:	19 % miRNA; Concentration: 3604.20 pg/μl
miRNA / Small RNA Ratio [%]:	19		

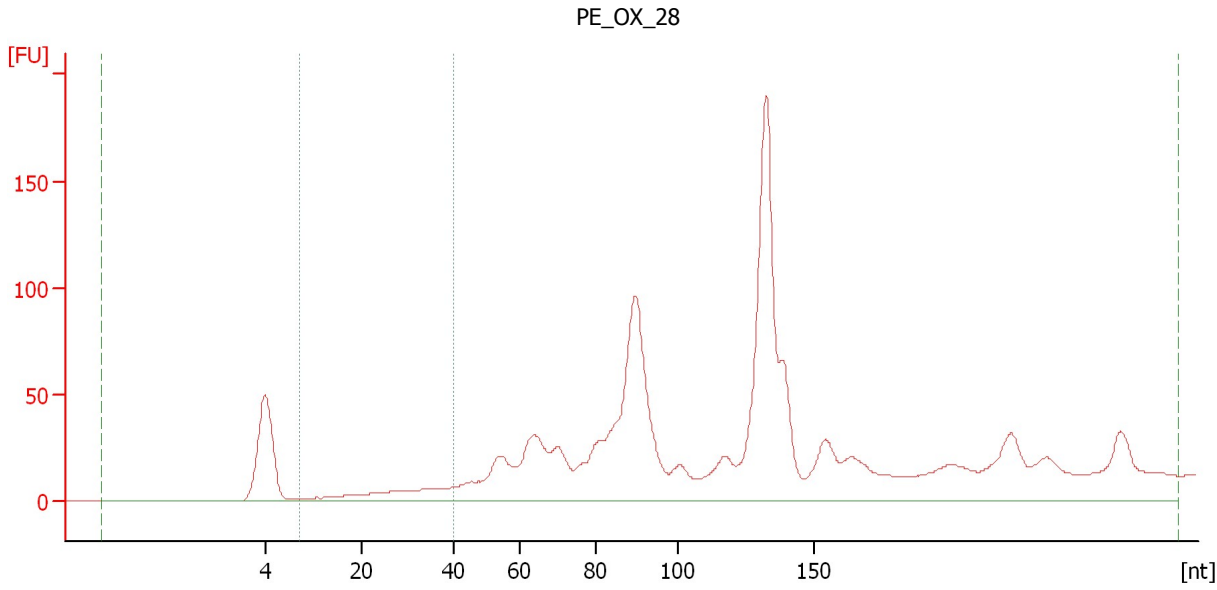
Region table for sample 5 : PE_OX_27

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	284	128	54.2	19,397.4	100	
miRNA	10	40	29	26.9	3,604.2	19	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : PE_OX_28

Small RNA Concentration [pg/μl]:	12,647.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,000.2	Result Flagging Label:	16 % miRNA; Concentration: 2000.20 pg/μl
miRNA / Small RNA Ratio [%]:	16		

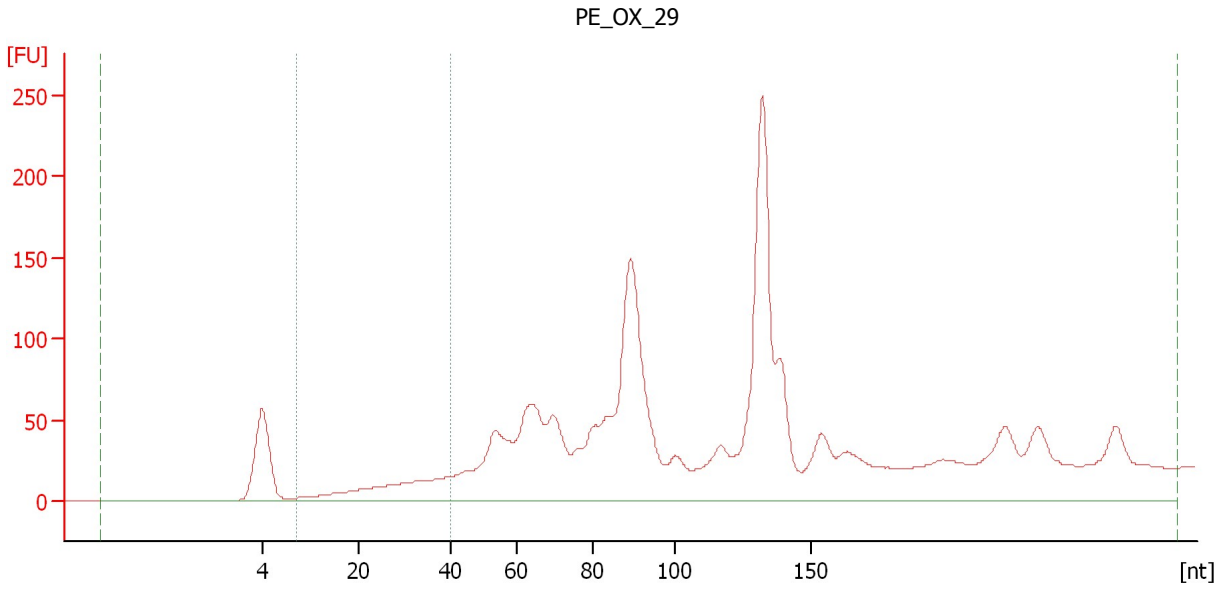
Region table for sample 6 : PE_OX_28

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	283	133	52.3	12,647.9	100	
miRNA	10	40	28	29.0	2,000.2	16	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : PE_OX_29

Small RNA Concentration [pg/μl]:	19,577.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	4,019.4	Result Flagging Label:	21 % miRNA; Concentration: 4019.40 pg/μl
miRNA / Small RNA Ratio [%]:	21		

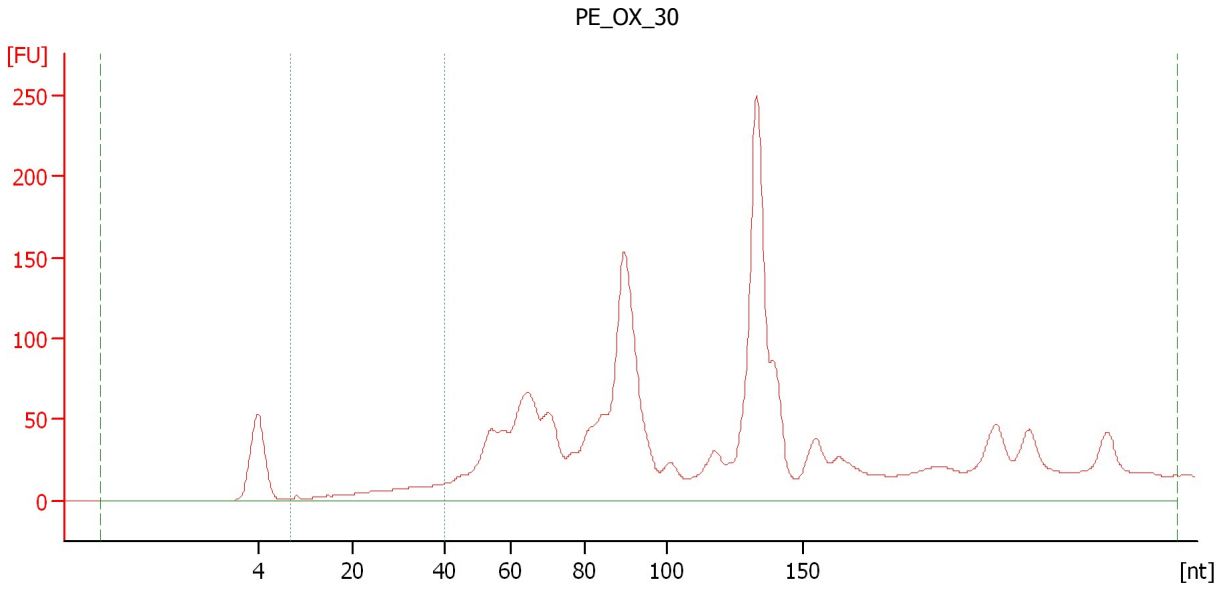
Region table for sample 7 : PE_OX_29

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	285	132	53.9	19,577.8	100	
miRNA	10	40	28	28.7	4,019.4	21	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : PE_OX_30

Small RNA Concentration [pg/μl]:	18,663.0	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,849.1	Result Flagging Label:	15 % miRNA; Concentration: 2849.10 pg/μl
miRNA / Small RNA Ratio [%]:	15		

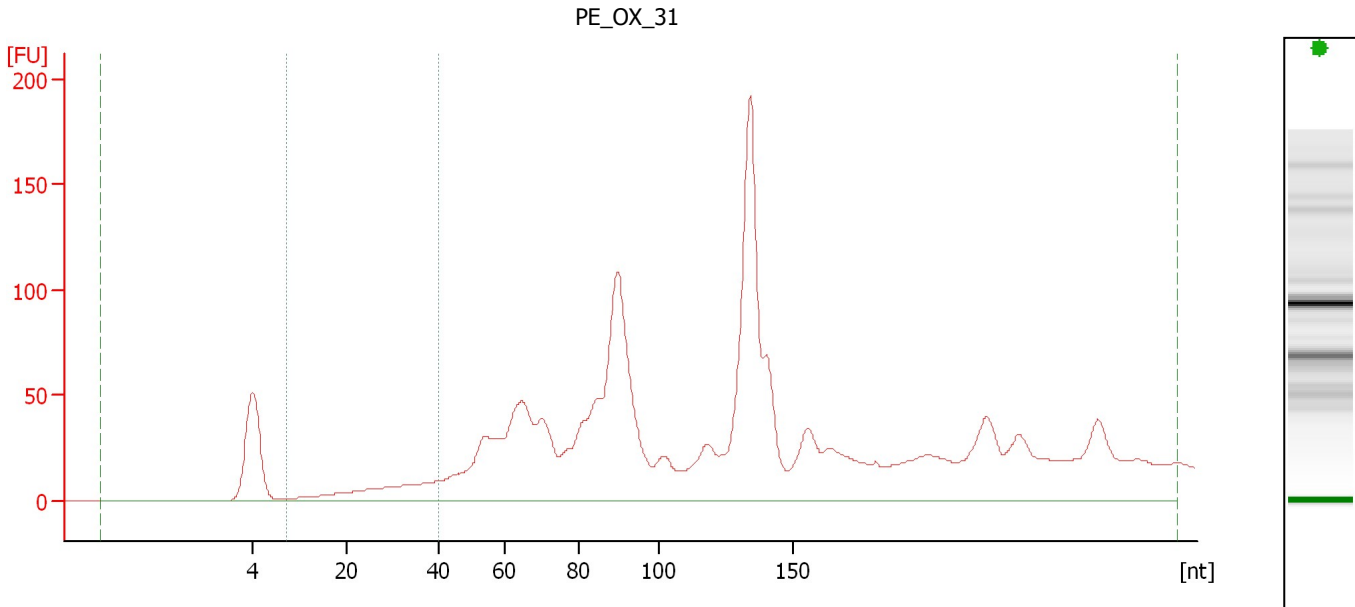
Region table for sample 8 : PE_OX_30

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	289	130	53.8	18,663.0	100	
miRNA	10	40	28	28.7	2,849.1	15	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : PE_OX_31

Small RNA Concentration [pg/μl]:	16,230.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,767.4	Result Flagging Label:	17 % miRNA; Concentration: 2767.40 pg/μl
miRNA / Small RNA Ratio [%]:	17		

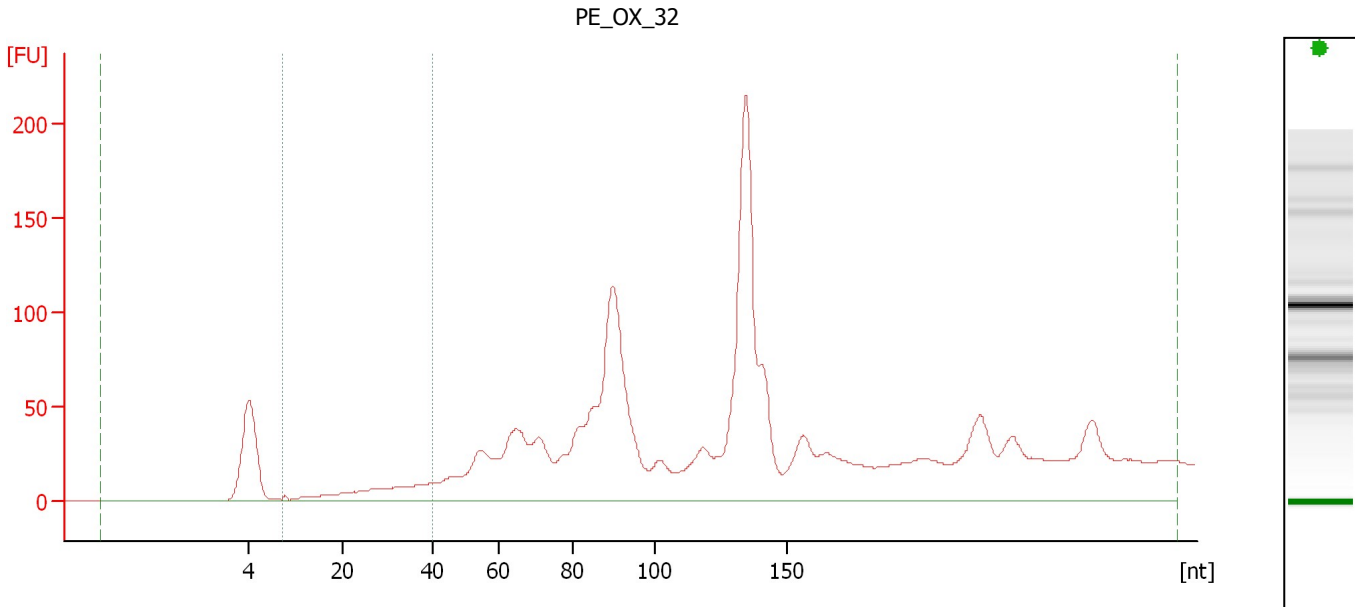
Region table for sample 9 : PE_OX_31

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	292	137	53.8	16,230.6	100	
miRNA	10	40	28	28.3	2,767.4	17	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : PE_OX_32

Small RNA Concentration [pg/μl]:	15,641.2	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,646.3	Result Flagging Label:	17 % miRNA; Concentration: 2646.30 pg/μl
miRNA / Small RNA Ratio [%]:	17		

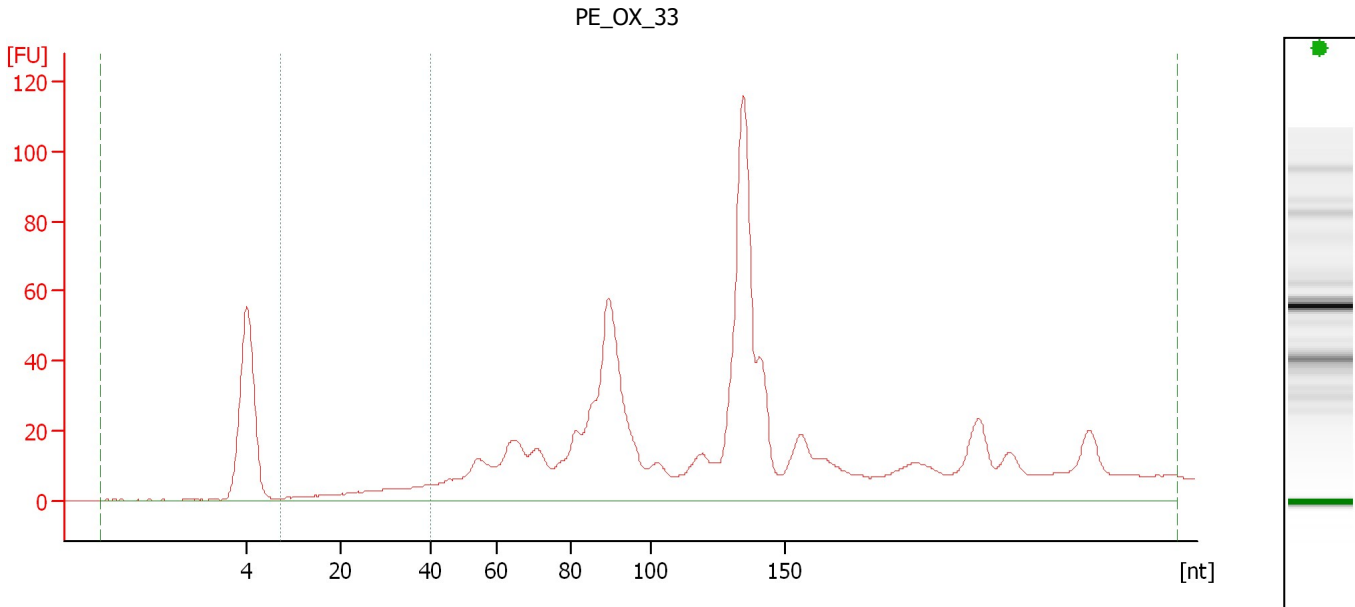
Region table for sample 10 : PE_OX_32

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	296	142	52.5	15,641.2	100	
miRNA	10	40	28	28.3	2,646.3	17	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : PE_OX_33

Small RNA Concentration [pg/μl]:	7,167.7	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,127.9	Result Flagging Label:	16 % miRNA; Concentration: 1127.90 pg/μl
miRNA / Small RNA Ratio [%]:	16		

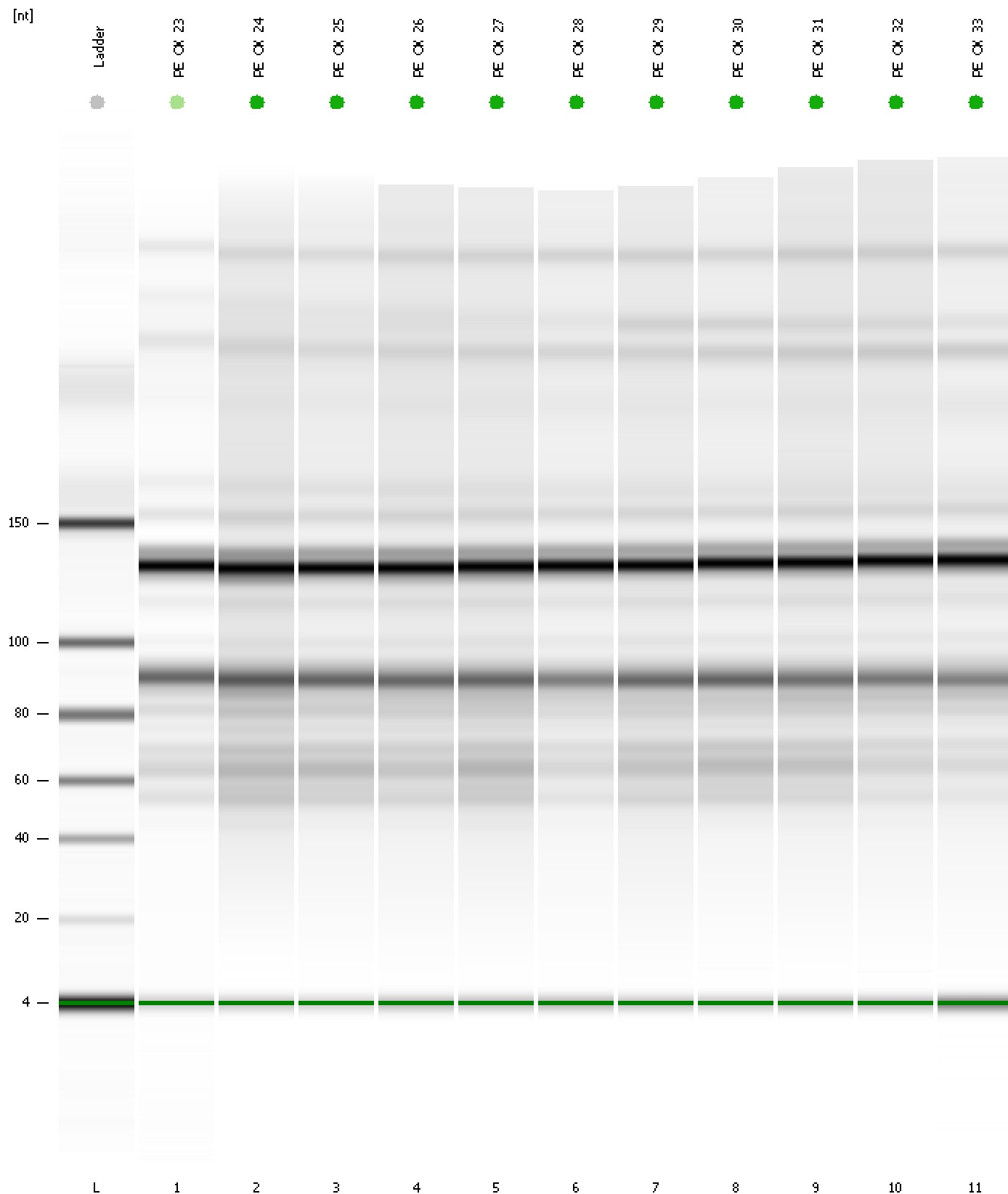
Region table for sample 11 : PE_OX_33

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	297	132	56.4	7,167.7	100	
miRNA	10	40	28	28.4	1,127.9	16	

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
Modified: 8/6/2019 10:30:23 AM

Gel Image



Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_003.xad

Created: 8/6/2019 9:56:13 AM
 Modified: 8/6/2019 10:30:23 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		8/6/2019 10:26:55 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\2019-08-06\2019-08-06_003.xad)		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/6/2019 9:56:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1