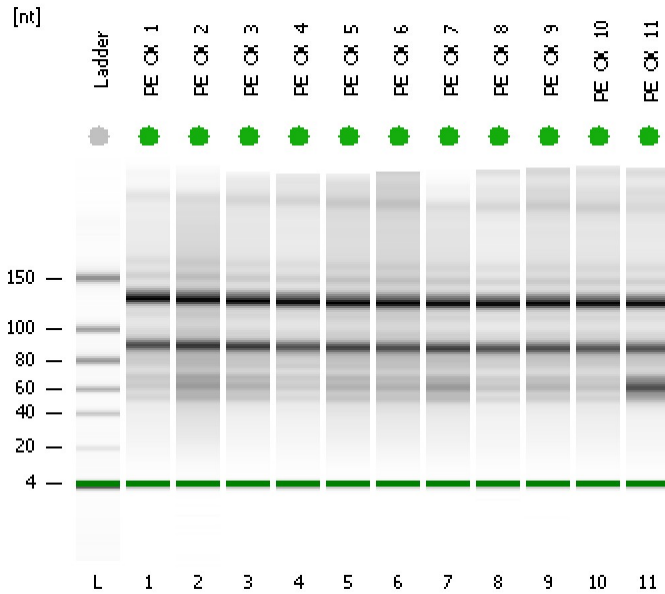


Assay Class: Small RNA  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
Modified: 8/6/2019 9:06:13 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

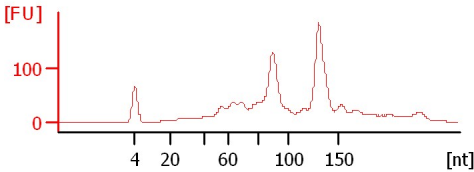
Assay Class: Small RNA  
Version: 1.2  
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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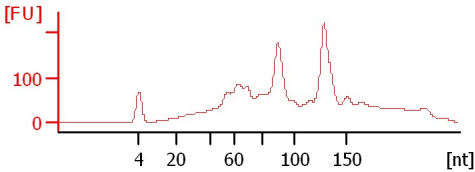
#### Chip Information:

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

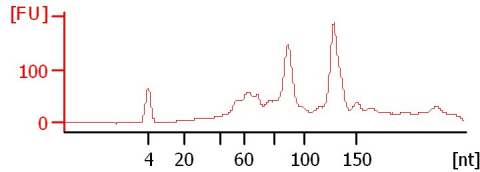
**PE\_OX\_1**  
22 % miRNA; Concentration: 3344.50 pg/ul



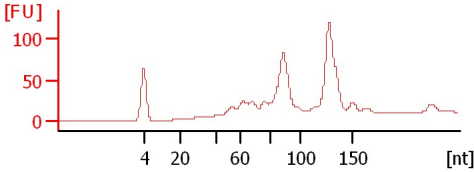
**PE\_OX\_2**  
27 % miRNA; Concentration: 7299.30 pg/ul



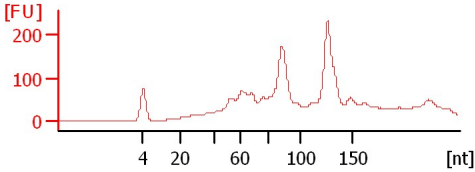
**PE\_OX\_3**  
19 % miRNA; Concentration: 3371.60 pg/ul



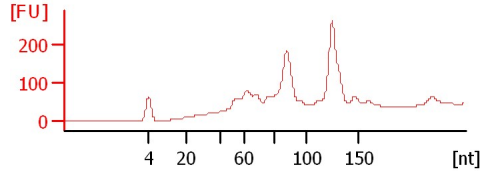
**PE\_OX\_4**  
21 % miRNA; Concentration: 2167.50 pg/ul



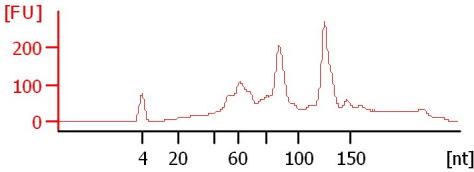
**PE\_OX\_5**  
24 % miRNA; Concentration: 5294.70 pg/ul



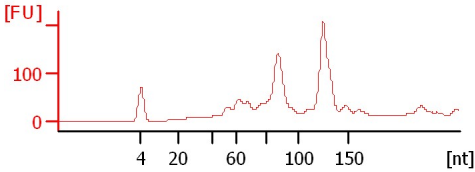
**PE\_OX\_6**  
24 % miRNA; Concentration: 7149.90 pg/ul



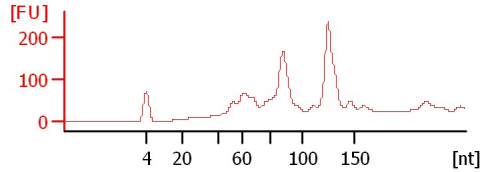
**PE\_OX\_7**  
24 % miRNA; Concentration: 6079.20 pg/ul



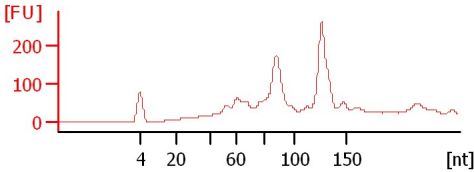
**PE\_OX\_8**  
22 % miRNA; Concentration: 3271.70 pg/ul



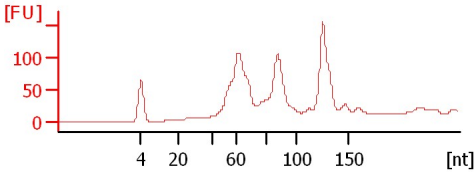
**PE\_OX\_9**  
21 % miRNA; Concentration: 4145.10 pg/ul



**PE\_OX\_10**  
23 % miRNA; Concentration: 4626.10 pg/ul















**PE\_OX\_11**  
17 % miRNA; Concentration: 2902.80 pg/ul



Assay Class: Small RNA  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
Modified: 8/6/2019 9:06:13 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Status	Result Label	Result Color
PE_OX_1		✓	22 % miRNA; Concentration: 3344.50 pg/μl	
PE_OX_2		✓	27 % miRNA; Concentration: 7299.30 pg/μl	
PE_OX_3		✓	19 % miRNA; Concentration: 3371.60 pg/μl	
PE_OX_4		✓	21 % miRNA; Concentration: 2167.50 pg/μl	
PE_OX_5		✓	24 % miRNA; Concentration: 5294.70 pg/μl	
PE_OX_6		✓	24 % miRNA; Concentration: 7149.90 pg/μl	
PE_OX_7		✓	24 % miRNA; Concentration: 6079.20 pg/μl	
PE_OX_8		✓	22 % miRNA; Concentration: 3271.70 pg/μl	
PE_OX_9		✓	21 % miRNA; Concentration: 4145.10 pg/μl	
PE_OX_10		✓	23 % miRNA; Concentration: 4626.10 pg/μl	
PE_OX_11		✓	17 % miRNA; Concentration: 2902.80 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\_001.xad

Created: 8/6/2019 8:29:47 AM  
Modified: 8/6/2019 9:06:13 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/ $\mu$ l] : 2500  
Lower Marker Concentration [pg/ $\mu$ l] : 500  
Upper Marker Concentration [pg/ $\mu$ l] : 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

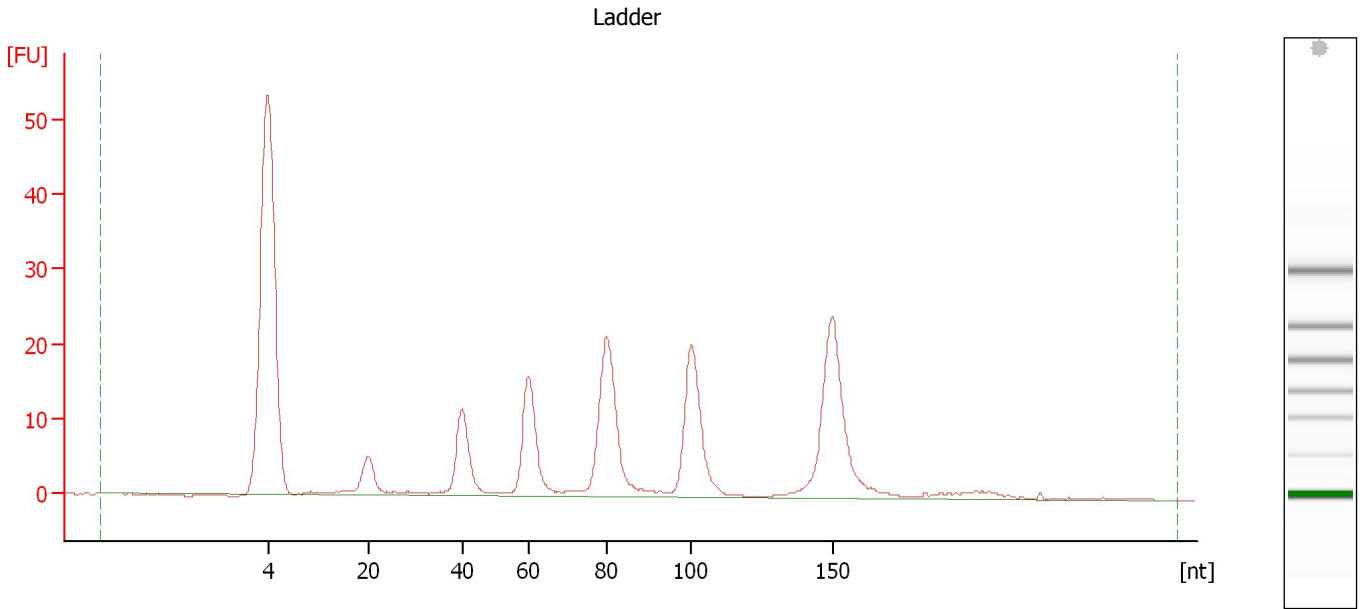
**Ladder**

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\_001.xad

Created: 8/6/2019 8:29:47 AM  
Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Result Flagging Color:

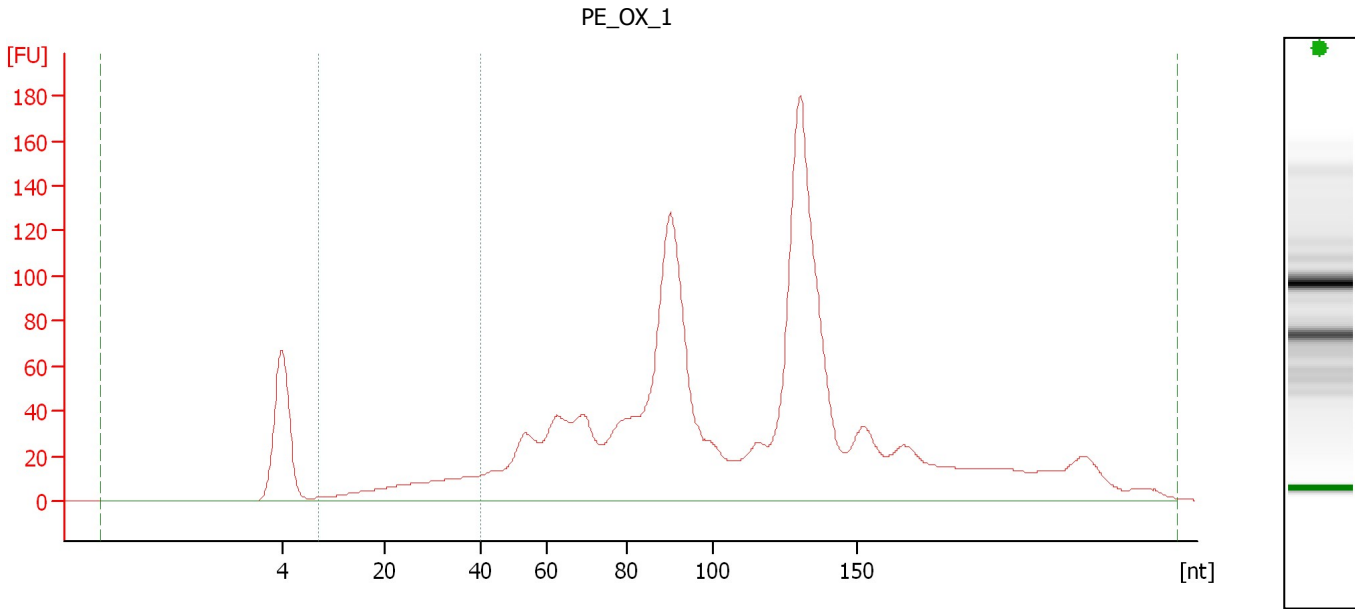
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : PE\_OX\_1**

Small RNA Concentration [pg/μl]:	14,926.7	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	3,344.5	Result Flagging Label:	22 % miRNA; Concentration: 3344.50 pg/μl
miRNA / Small RNA Ratio [%]:	22		

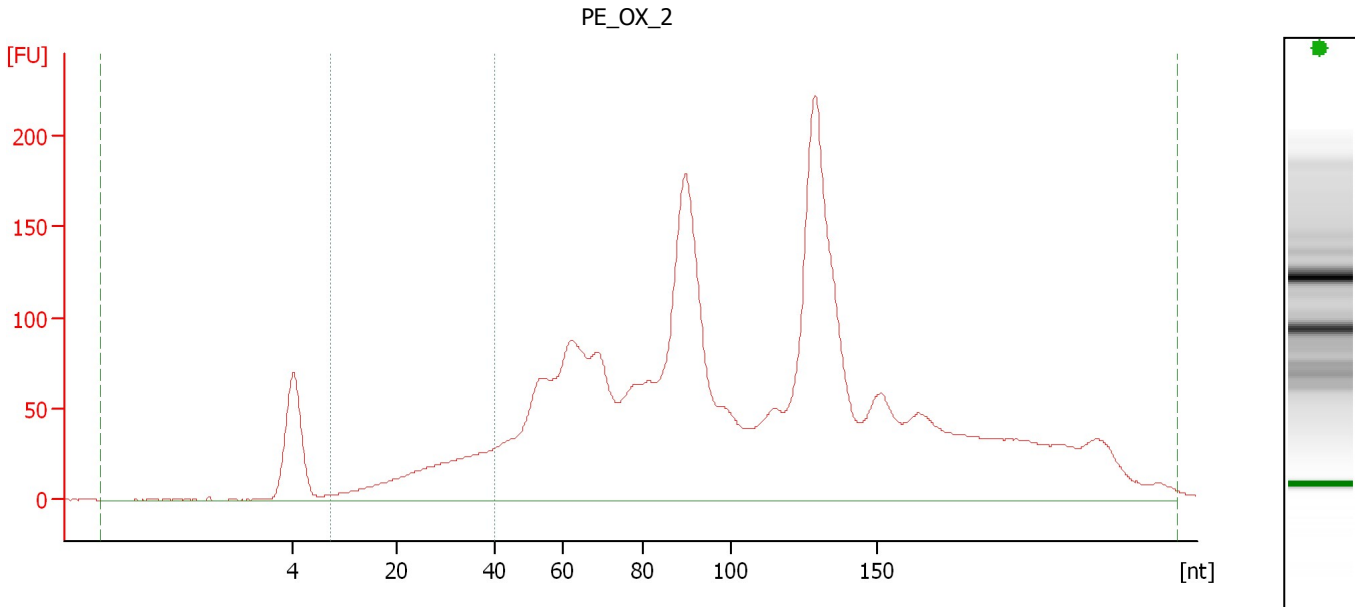
**Region table for sample 1 : PE\_OX\_1**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	262	111	49.2	14,926.7	100	<span style="background-color: maroon; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	28.7	3,344.5	22	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : PE\_OX\_2**

Small RNA Concentration [pg/μl]:	27,035.4	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	7,299.3	Result Flagging Label:	27 % miRNA; Concentration: 7299.30 pg/μl
miRNA / Small RNA Ratio [%]:	27		

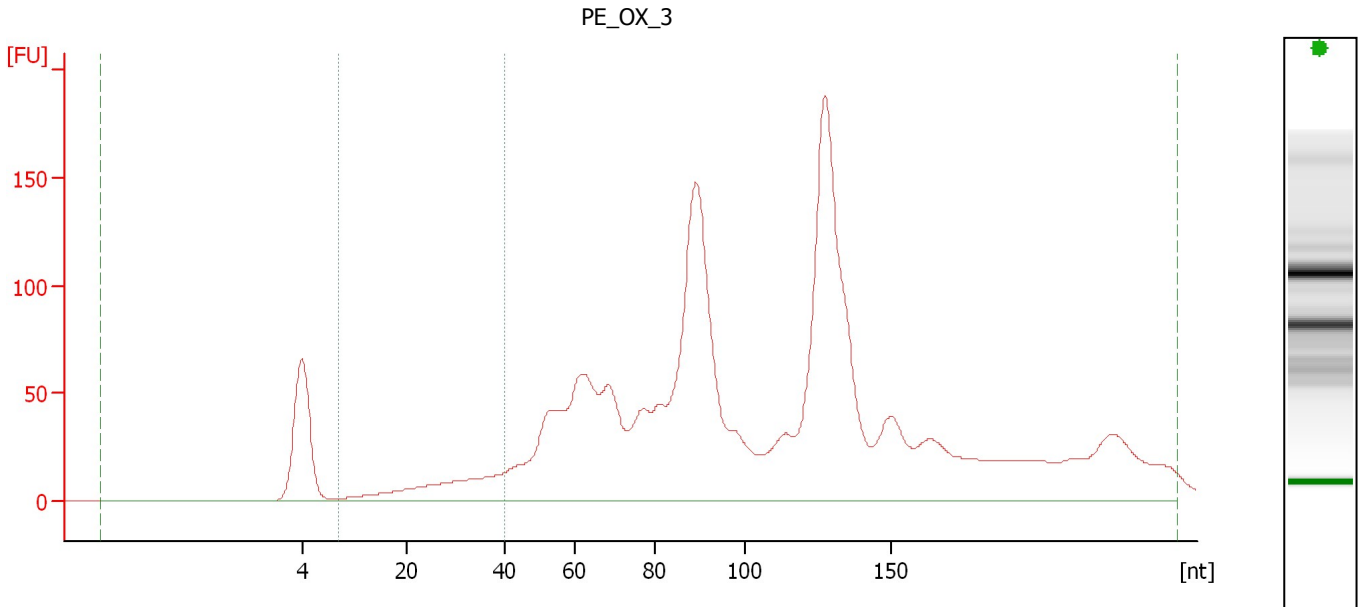
**Region table for sample 2 : PE\_OX\_2**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	253	110	50.2	27,035.4	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	27.7	7,299.3	27	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : PE\_OX\_3**

Small RNA Concentration [pg/μl]:	17,860.3	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	3,371.6	Result Flagging Label:	19 % miRNA; Concentration: 3371.60 pg/μl
miRNA / Small RNA Ratio [%]:	19		

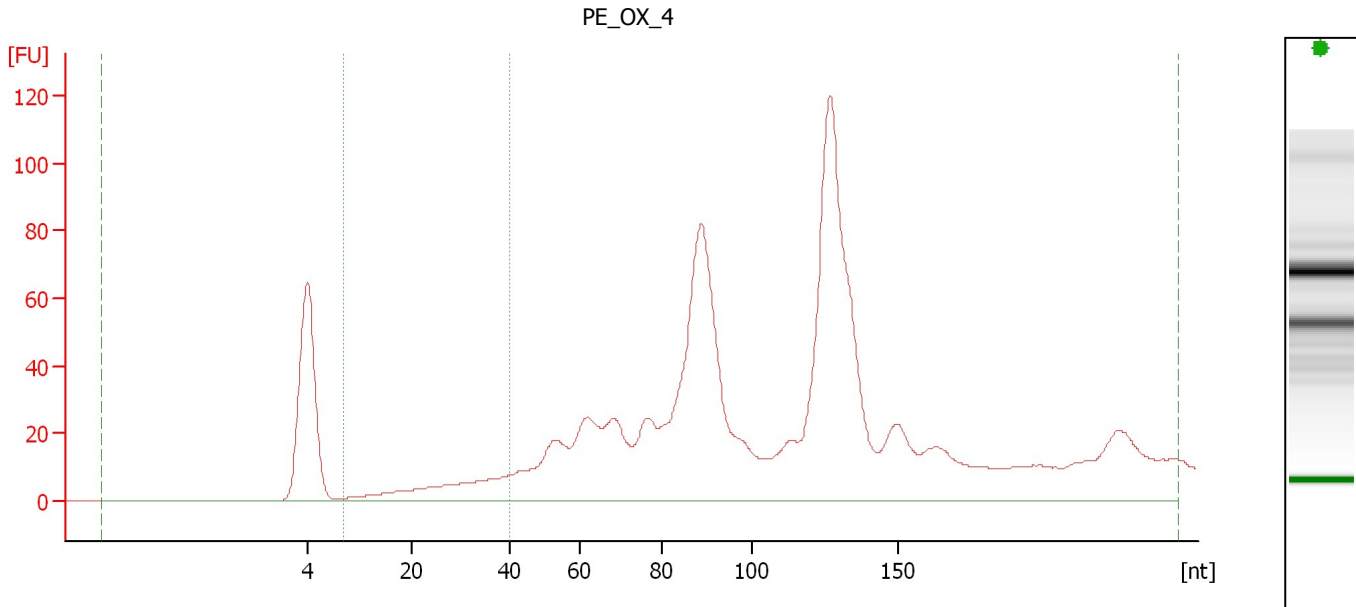
**Region table for sample 3 : PE\_OX\_3**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	247	112	49.7	17,860.3	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	29	27.2	3,371.6	19	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : PE\_OX\_4**

Small RNA Concentration [pg/μl]:	10,472.2	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	2,167.5	Result Flagging Label:	21 % miRNA; Concentration: 2167.50 pg/μl
miRNA / Small RNA Ratio [%]:	21		

**Region table for sample 4 : PE\_OX\_4**

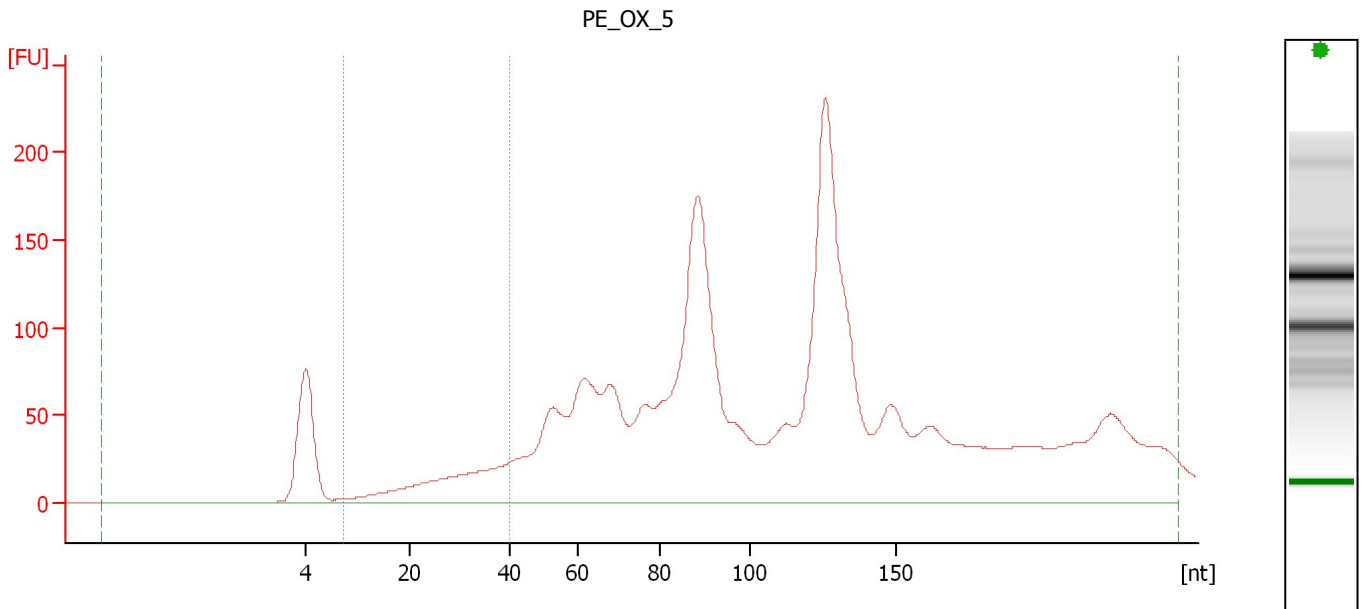
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	245	112	52.3	10,472.2	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	29.3	2,167.5	21	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>



Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : PE\_OX\_5**

Small RNA Concentration [pg/μl]:	21,895.8	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	5,294.7	Result Flagging Label:	24 % miRNA; Concentration: 5294.70 pg/μl
miRNA / Small RNA Ratio [%]:	24		

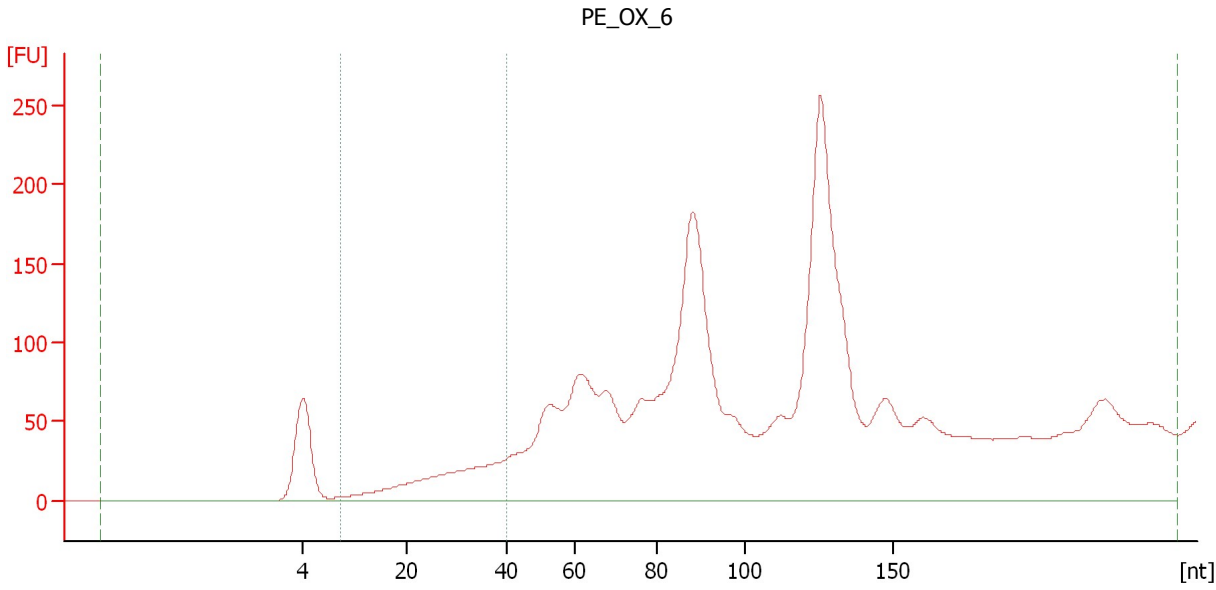
**Region table for sample 5 : PE\_OX\_5**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	245	116	50.6	21,895.8	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	28.0	5,294.7	24	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : PE\_OX\_6**

Small RNA Concentration [pg/μl]:	29,840.8	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	7,149.9	Result Flagging Label:	24 % miRNA; Concentration: 7149.90 pg/μl
miRNA / Small RNA Ratio [%]:	24		

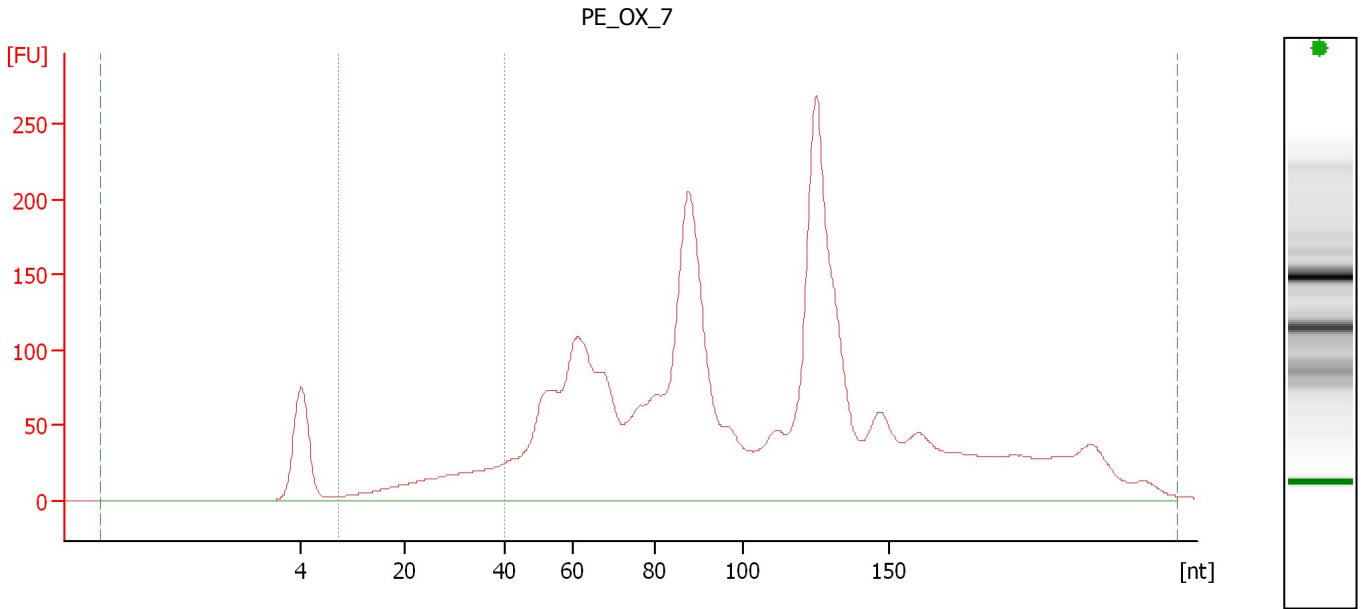
**Region table for sample 6 : PE\_OX\_6**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	247	120	49.6	29,840.8	100	<span style="background-color: maroon; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	27.4	7,149.9	24	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : PE\_OX\_7**

Small RNA Concentration [pg/μl]:	25,570.0	Result Flagging Color:	<span style="background-color: green; color: green;"> </span>
miRNA Concentration [pg/μl]:	6,079.2	Result Flagging Label:	24 % miRNA; Concentration: 6079.20 pg/μl
miRNA / Small RNA Ratio [%]:	24		

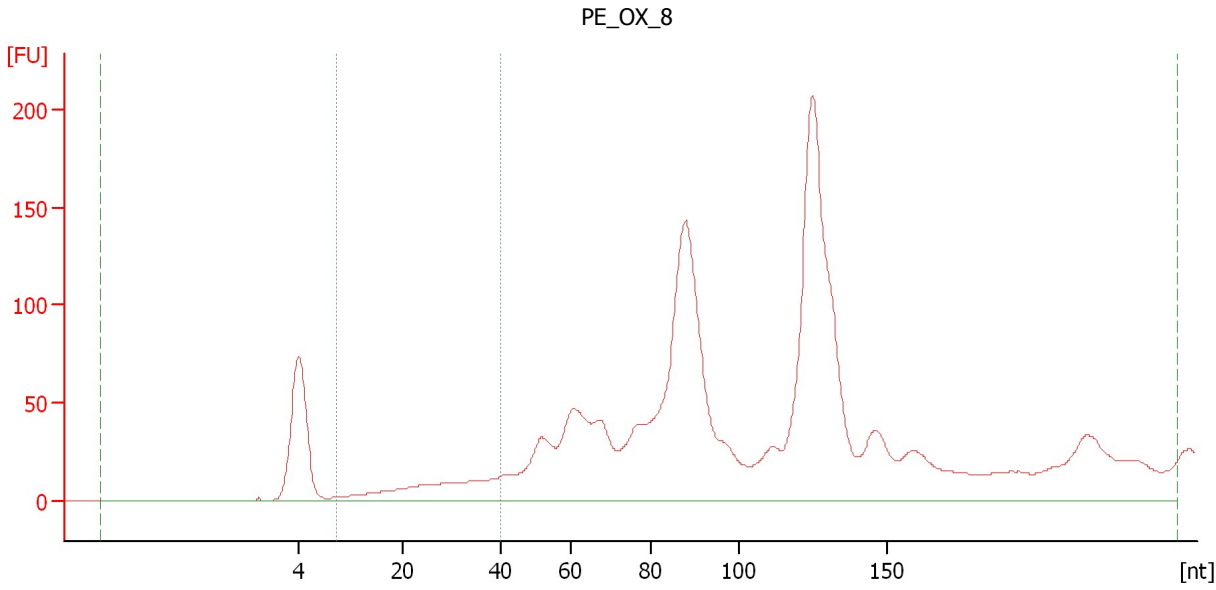
**Region table for sample 7 : PE\_OX\_7**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	248	107	49.5	25,570.0	100	<span style="background-color: maroon; color: maroon;"> </span>
miRNA	10	40	28	28.7	6,079.2	24	<span style="background-color: green; color: green;"> </span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : PE\_OX\_8**

Small RNA Concentration [pg/μl]:	15,107.0	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
miRNA Concentration [pg/μl]:	3,271.7	Result Flagging Label:	22 % miRNA; Concentration: 3271.70 pg/μl
miRNA / Small RNA Ratio [%]:	22		

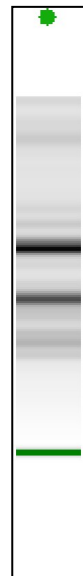
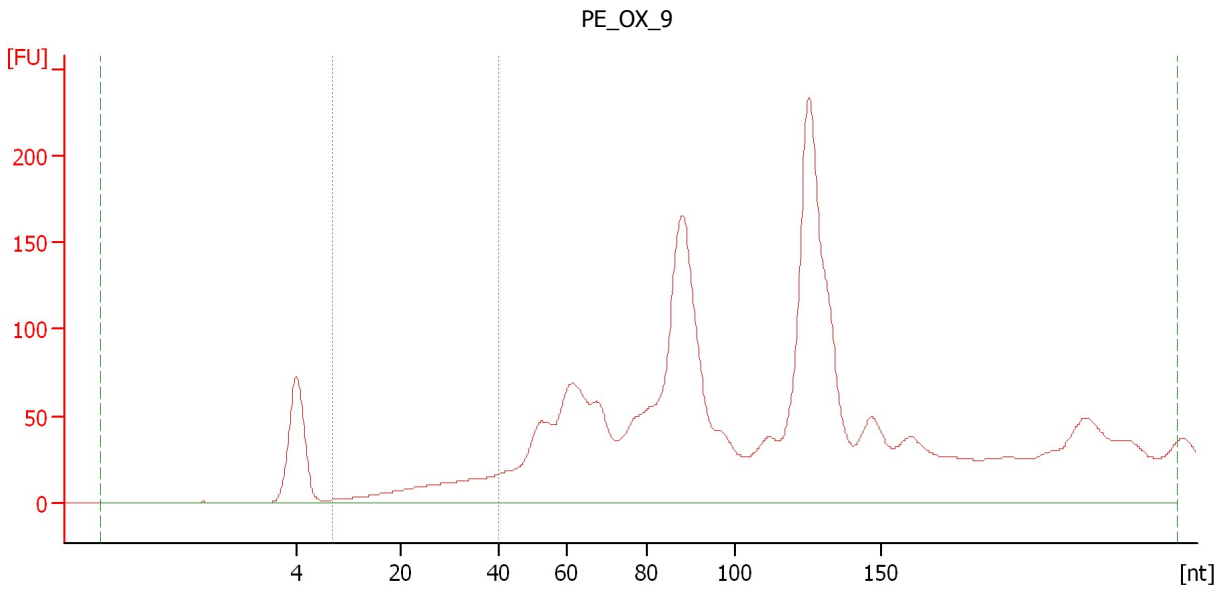
**Region table for sample 8 : PE\_OX\_8**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	249	112	51.0	15,107.0	100	<span style="background-color: purple; color: black;"> </span>
miRNA	10	40	27	29.5	3,271.7	22	<span style="background-color: green; color: black;"> </span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : PE\_OX\_9**

Small RNA Concentration [pg/μl]:	20,087.4	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
miRNA Concentration [pg/μl]:	4,145.1	Result Flagging Label:	21 % miRNA; Concentration: 4145.10 pg/μl
miRNA / Small RNA Ratio [%]:	21		

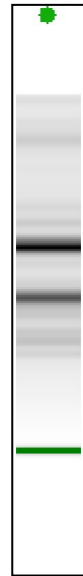
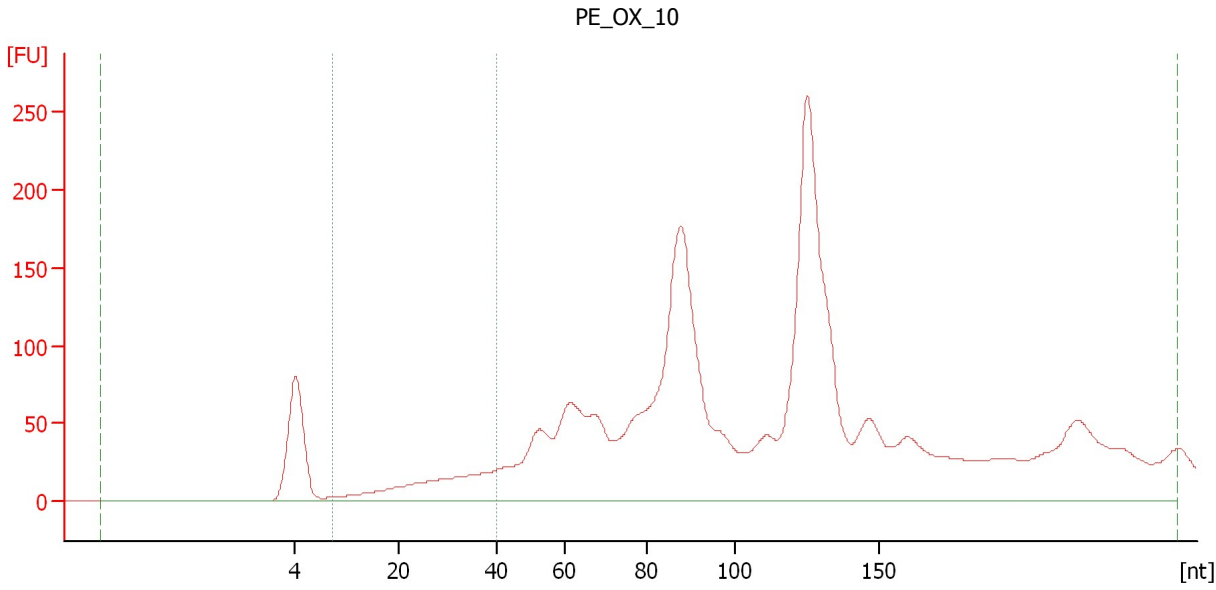
**Region table for sample 9 : PE\_OX\_9**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	251	118	50.7	20,087.4	100	<span style="background-color: purple; color: black;"> </span>
miRNA	10	40	28	28.5	4,145.1	21	<span style="background-color: green; color: black;"> </span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : PE OX 10**

Small RNA Concentration [pg/μl]:	19,884.8	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	4,626.1	Result Flagging Label:	23 % miRNA; Concentration: 4626.10 pg/μl
miRNA / Small RNA Ratio [%]:	23		

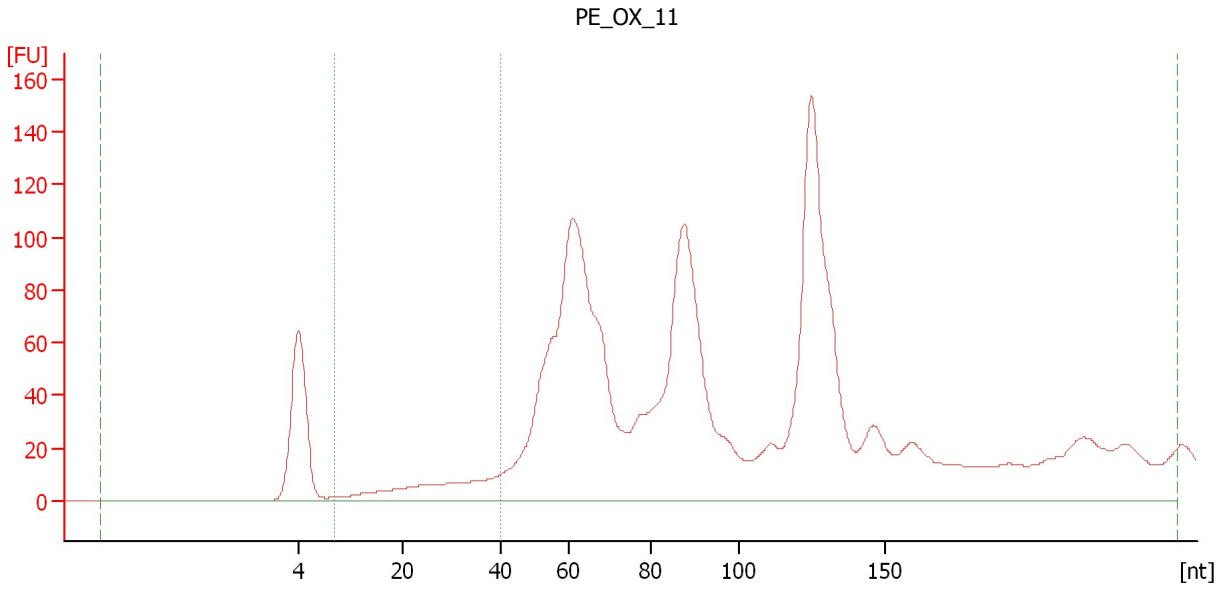
**Region table for sample 10 : PE OX 10**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	252	117	50.6	19,884.8	100	<span style="background-color: maroon; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	28.5	4,626.1	23	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : PE\_OX\_11**

Small RNA Concentration [pg/μl]:	17,297.9	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	2,902.8	Result Flagging Label:	17 % miRNA; Concentration: 2902.80 pg/μl
miRNA / Small RNA Ratio [%]:	17		

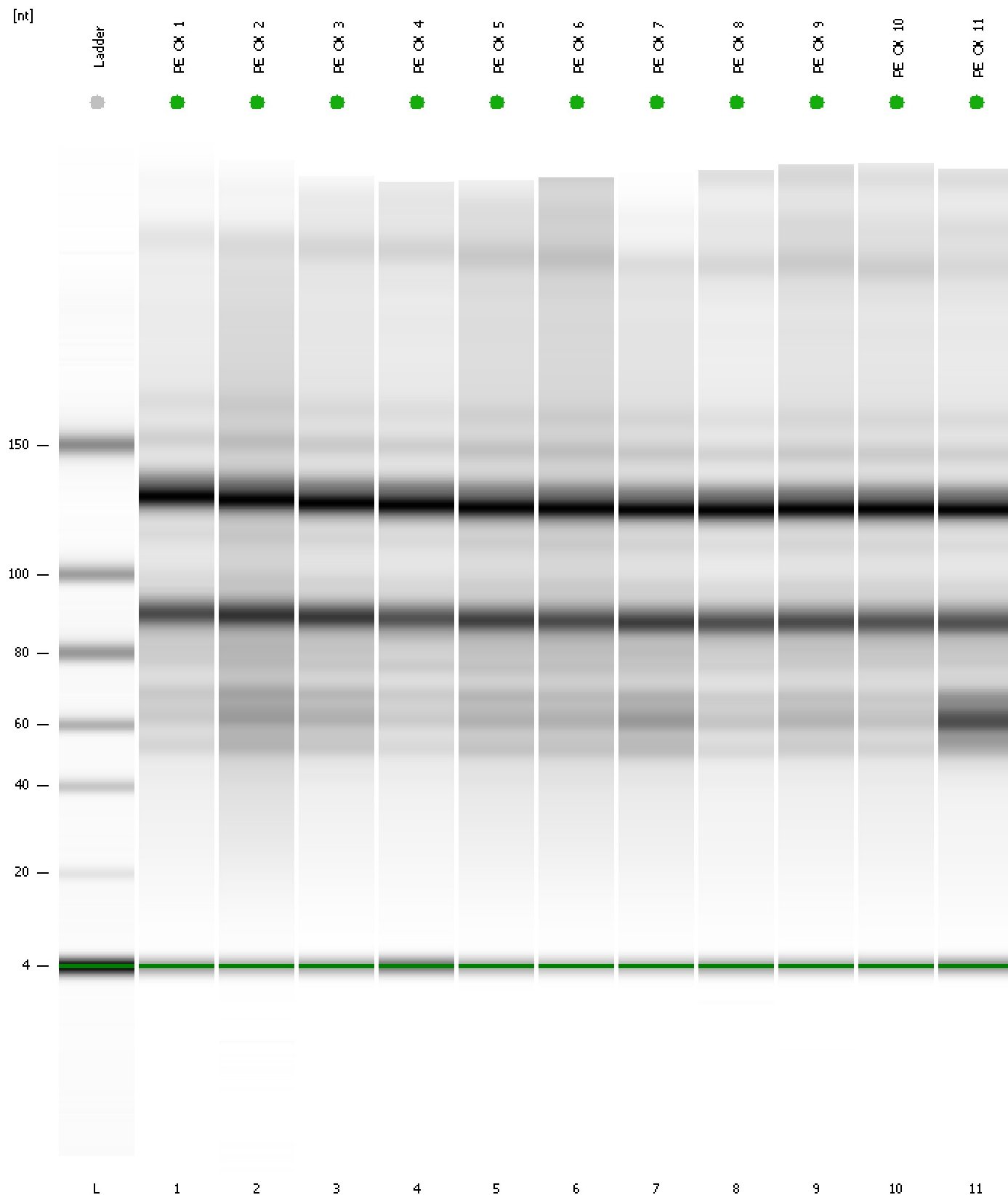
**Region table for sample 11 : PE\_OX\_11**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	250	107	54.5	17,297.9	100	<span style="background-color: #800000; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	27	30.0	2,902.8	17	<span style="background-color: #008000; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad

Created: 8/6/2019 8:29:47 AM  
Modified: 8/6/2019 9:06:13 AM

**Gel Image**





Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06\_001.xad  
 Created: 8/6/2019 8:29:47 AM  
 Modified: 8/6/2019 9:06:13 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 9:01:45 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_001.xad)		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/6/2019 8:29:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1