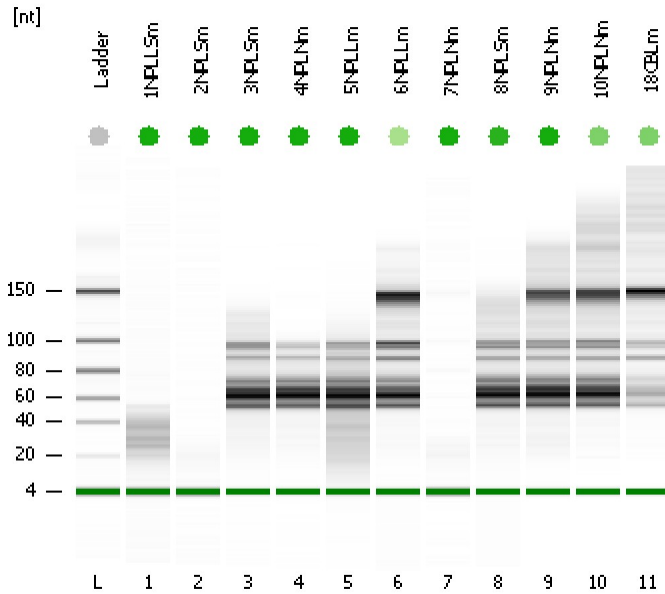


Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
Modified: 8/6/2019 12:09:38 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

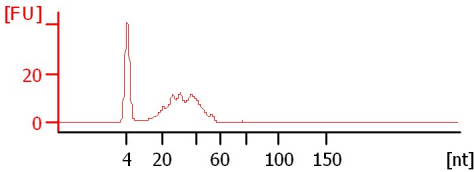
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Small RNA Series II.xsy
Assay Class: Small RNA
Version: 1.2
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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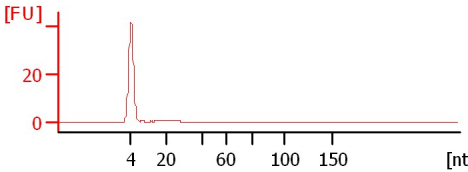
Chip Information:

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

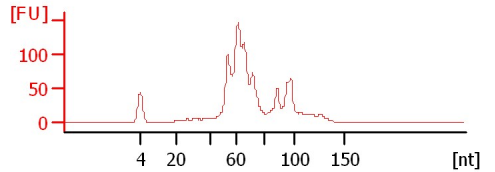
1NPLLSm
89 % miRNA; Concentration: 5779.90 pg/μl



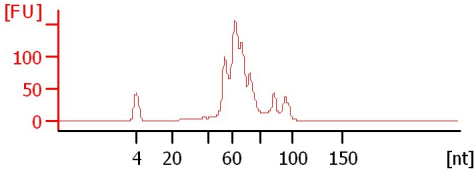
2NPLSm
95 % miRNA; Concentration: 453.60 pg/μl



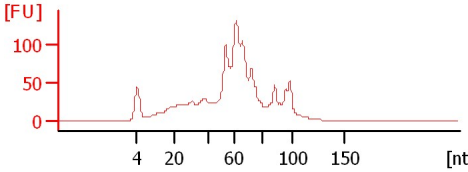
3NPLSm
15 % miRNA; Concentration: 2723.90 pg/μl



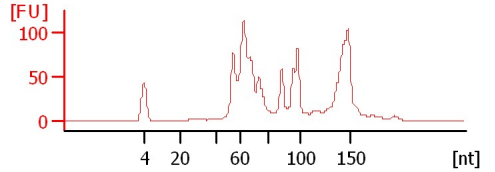
4NPLNm
14 % miRNA; Concentration: 2167.10 pg/μl



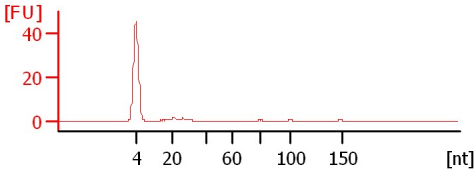
5NPLLm
49 % miRNA; Concentration: 13807.70 p...



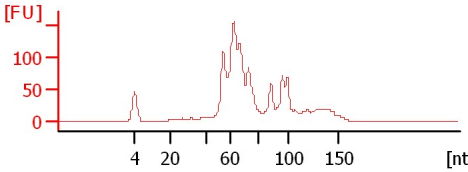
6NPLLm
5 % miRNA; Concentration: 704.50 pg/μl



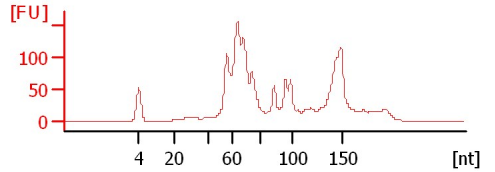
7NPLNm
92 % miRNA; Concentration: 682.80 pg/μl



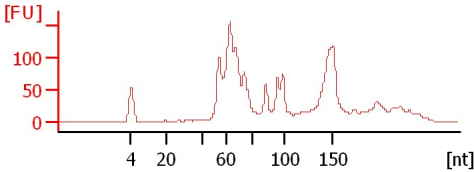
8NPLSm
11 % miRNA; Concentration: 2029.20 pg/μl



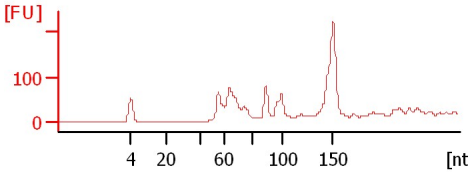
9NPLNm
15 % miRNA; Concentration: 3099.50 pg/μl



10NPLNm
7 % miRNA; Concentration: 1320.80 pg/μl















18CBLm
7 % miRNA; Concentration: 1052.40 pg/μl



Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
1NPLLSm		✓	89 % miRNA; Concentration: 5779.90 pg/μl	
2NPLSm		✓	95 % miRNA; Concentration: 453.60 pg/μl	
3NPLSm		✓	15 % miRNA; Concentration: 2723.90 pg/μl	
4NPLNm		✓	14 % miRNA; Concentration: 2167.10 pg/μl	
5NPLLm		✓	49 % miRNA; Concentration: 13807.70 pg/μl	
6NPLLm		✓	5 % miRNA; Concentration: 704.50 pg/μl	
7NPLNm		✓	92 % miRNA; Concentration: 682.80 pg/μl	
8NPLSm		✓	11 % miRNA; Concentration: 2029.20 pg/μl	
9NPLNm		✓	15 % miRNA; Concentration: 3099.50 pg/μl	
10NPLNm		✓	7 % miRNA; Concentration: 1320.80 pg/μl	
18CBLm		✓	7 % miRNA; Concentration: 1052.40 pg/μl	
Ladder		✓	Number of Peaks: 5	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
Modified: 8/6/2019 12:09:38 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

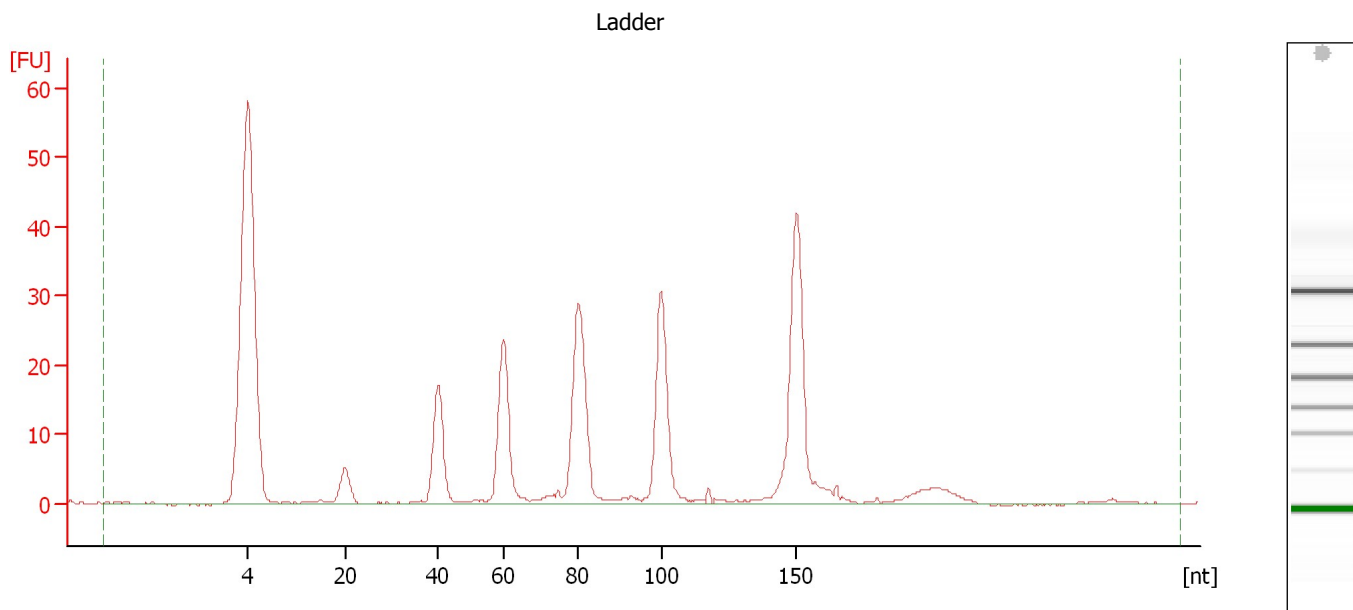
Ladder

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

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

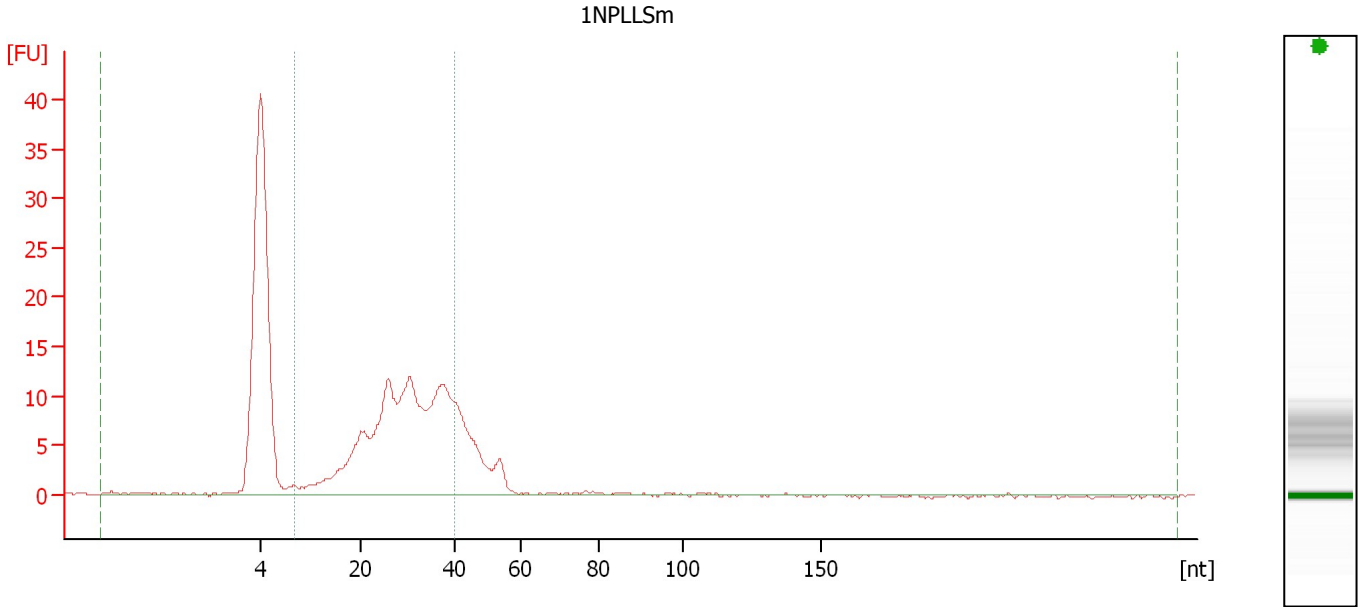
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1NPLLSm

Small RNA Concentration [pg/μl]:	6,495.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	5,779.9	Result Flagging Label:	89 % miRNA; Concentration: 5779.90 pg/μl
miRNA / Small RNA Ratio [%]:	89		

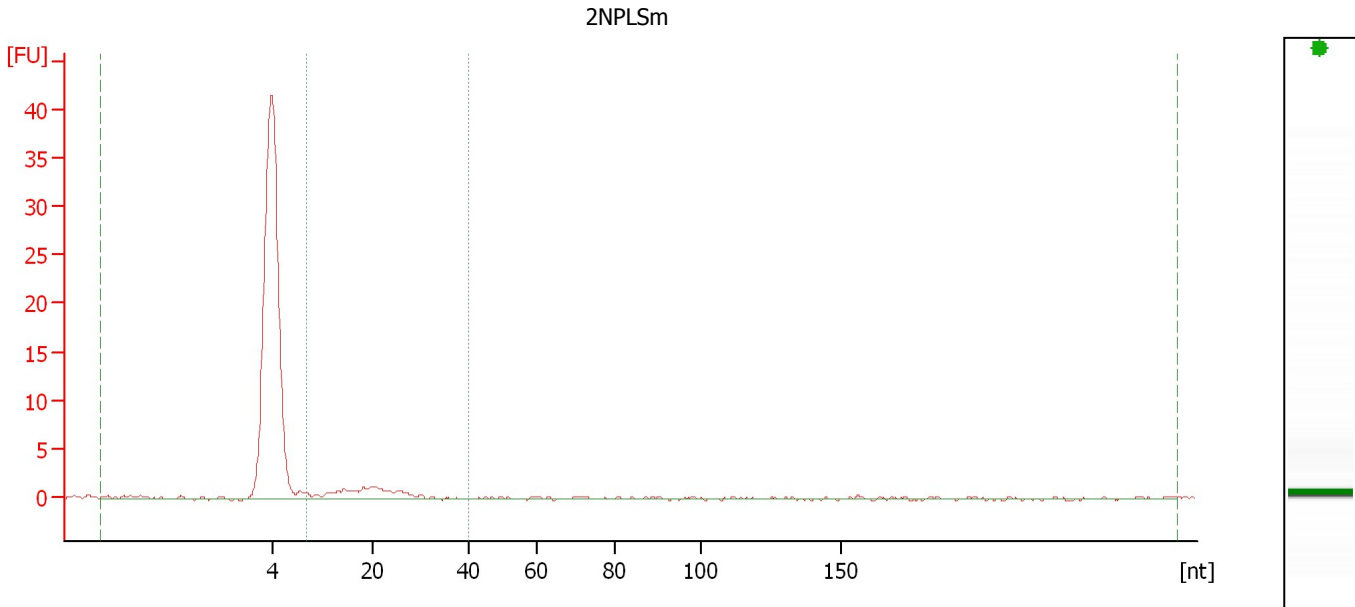
Region table for sample 1 : 1NPLLSm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	279	23	74.9	6,495.3	100	
miRNA	10	40	29	24.6	5,779.9	89	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2NPLSm

Small RNA Concentration [pg/μl]:	475.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	453.6	Result Flagging Label:	95 % miRNA; Concentration: 453.60 pg/μl
miRNA / Small RNA Ratio [%]:	95		

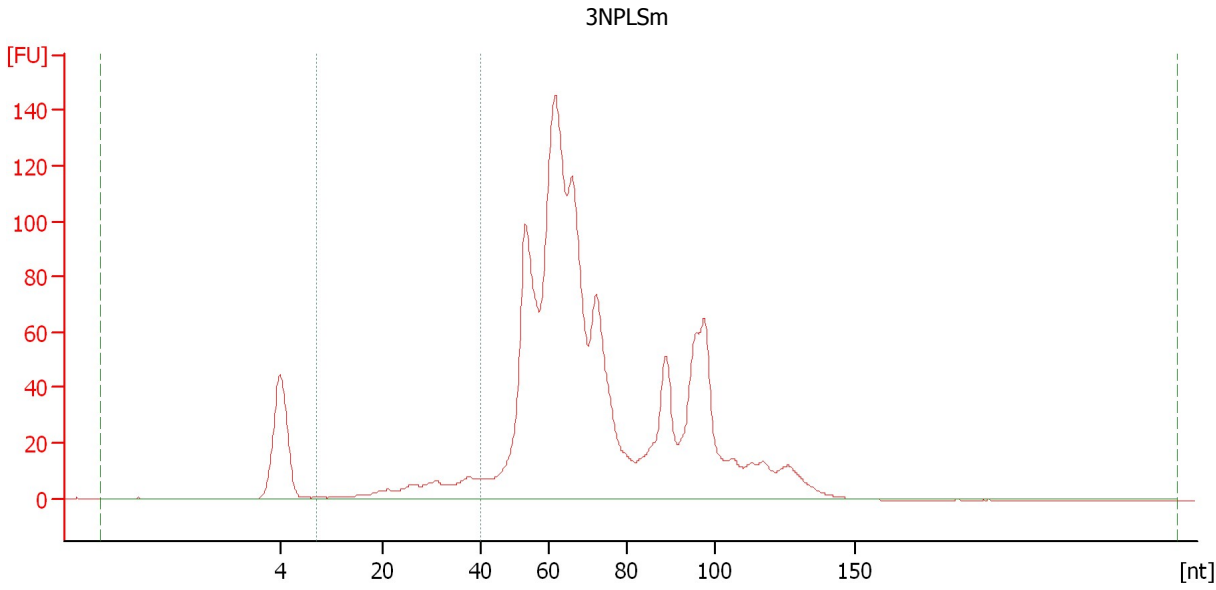
Region table for sample 2 : 2NPLSm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	270	7	100.0	475.3	100	
miRNA	10	40	20	25.1	453.6	95	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 3NPLSm

Small RNA Concentration [pg/μl]:	17,824.1	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,723.9	Result Flagging Label:	15 % miRNA; Concentration: 2723.90 pg/μl
miRNA / Small RNA Ratio [%]:	15		

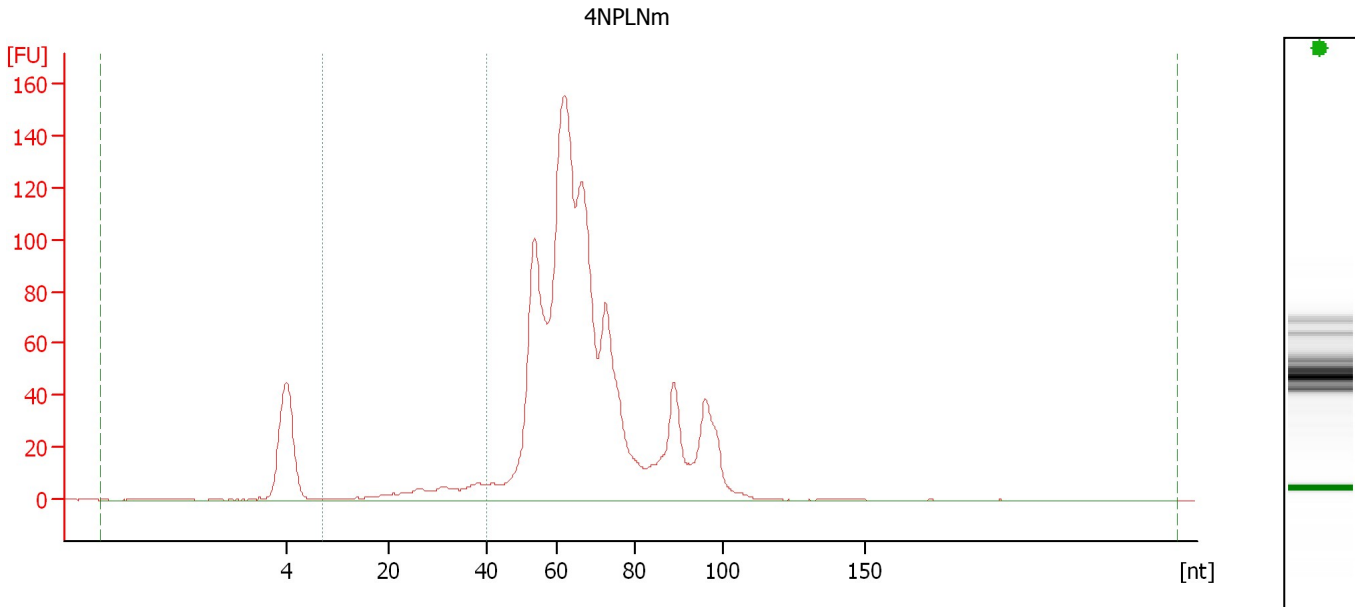
Region table for sample 3 : 3NPLSm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	263	69	37.0	17,824.1	100	
miRNA	10	40	30	23.9	2,723.9	15	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 4NPLNm

Small RNA Concentration [pg/μl]:	15,632.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,167.1	Result Flagging Label:	14 % miRNA; Concentration: 2167.10 pg/μl
miRNA / Small RNA Ratio [%]:	14		

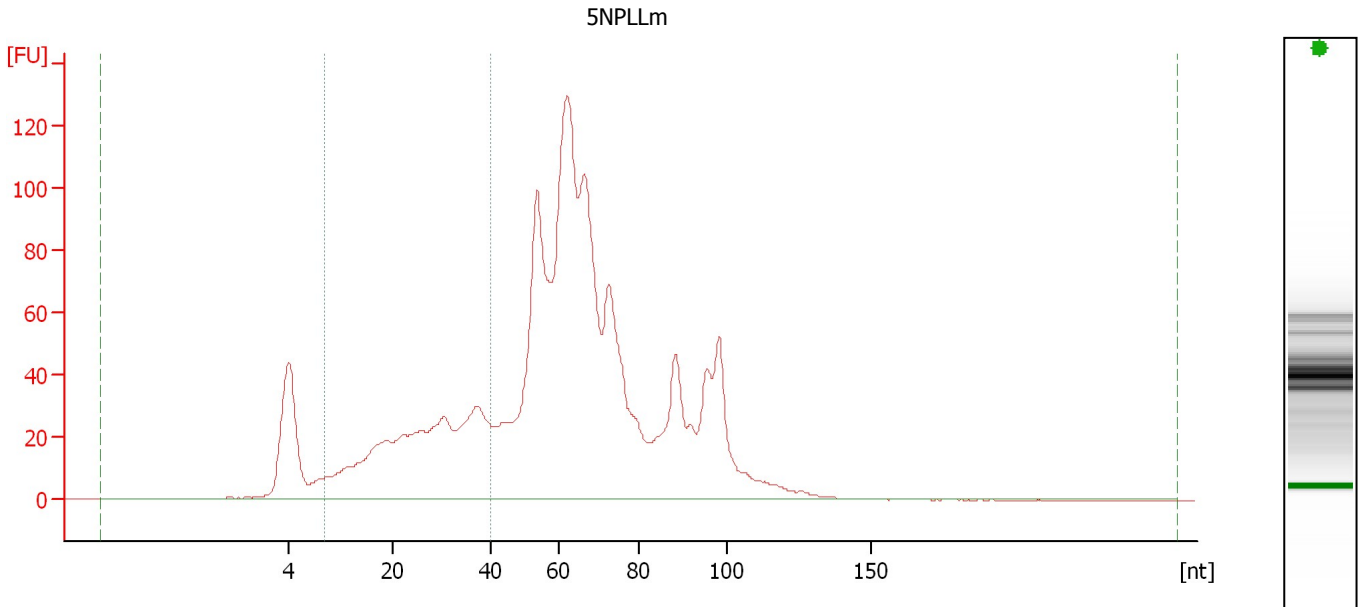
Region table for sample 4 : 4NPLNm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	259	63	33.5	15,632.5	100	
miRNA	10	40	30	24.0	2,167.1	14	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 5NPLLm

Small RNA Concentration [pg/μl]:	28,384.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	13,807.7	Result Flagging Label:	49 % miRNA; Concentration: 13807.70 pg/μl
miRNA / Small RNA Ratio [%]:	49		

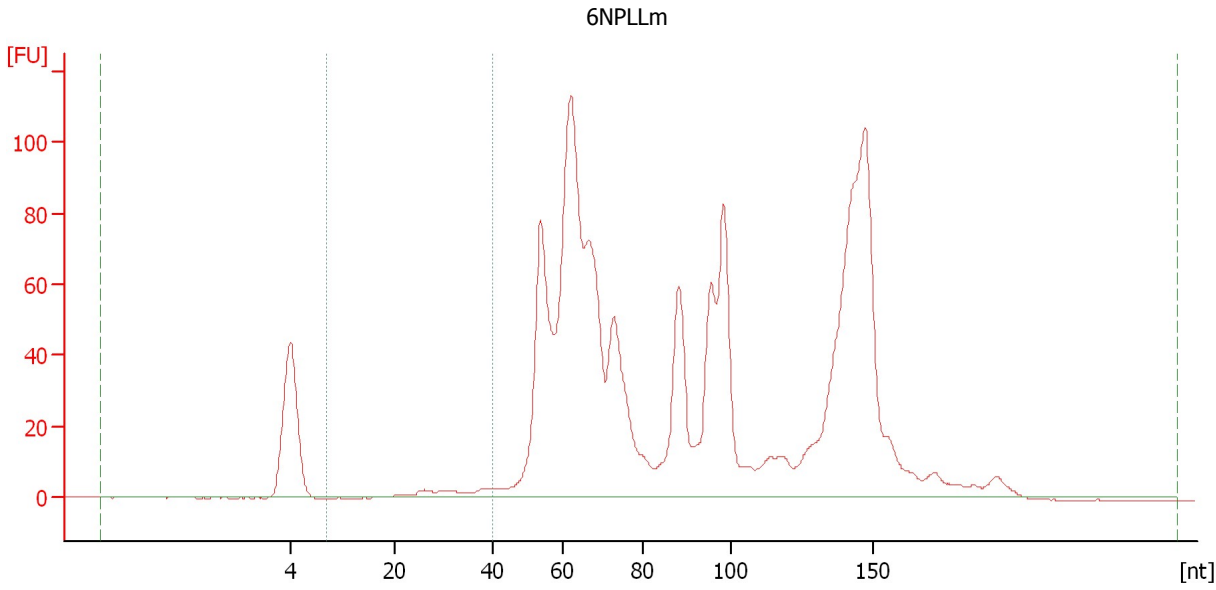
Region table for sample 5 : 5NPLLm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	257	58	45.0	28,384.6	100	
miRNA	10	40	27	31.4	13,807.7	49	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 6NPLLm

Small RNA Concentration [pg/μl]:	15,119.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	704.5	Result Flagging Label:	5 % miRNA; Concentration: 704.50 pg/μl
miRNA / Small RNA Ratio [%]:	5		

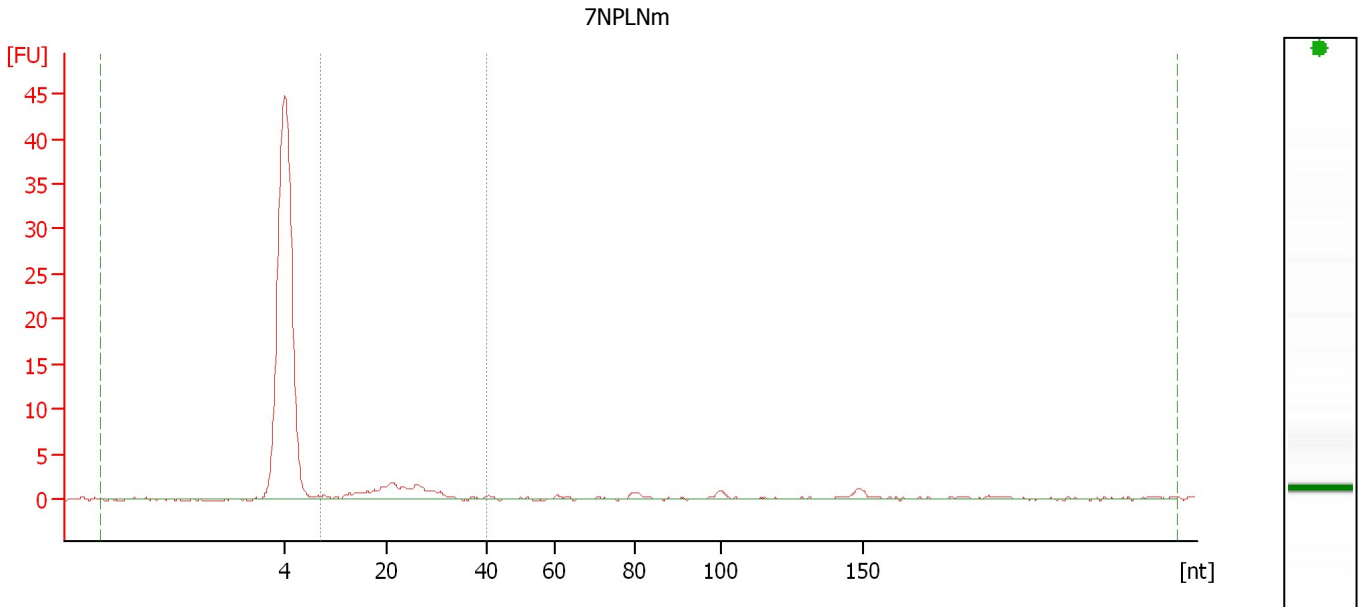
Region table for sample 6 : 6NPLLm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	256	94	44.5	15,119.5	100	
miRNA	10	40	32	17.1	704.5	5	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 7NPLNm

Small RNA Concentration [pg/μl]:	741.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	682.8	Result Flagging Label:	92 % miRNA; Concentration: 682.80 pg/μl
miRNA / Small RNA Ratio [%]:	92		

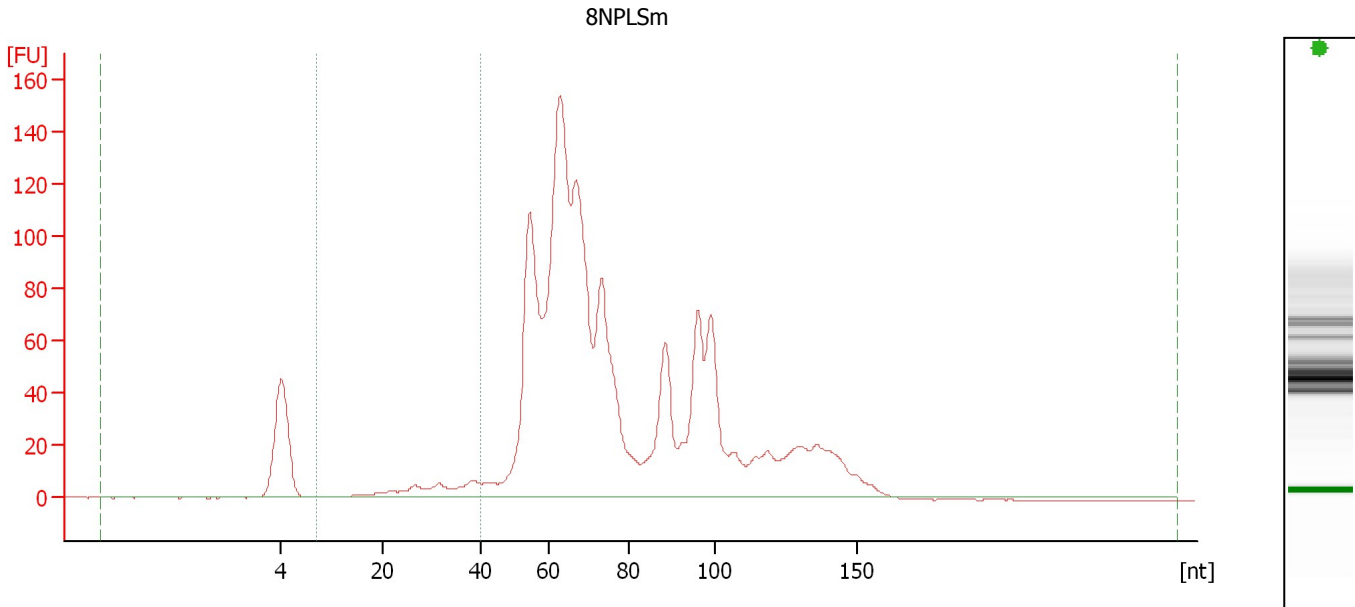
Region table for sample 7 : 7NPLNm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	260	17	100.0	741.4	100	
miRNA	10	40	22	25.2	682.8	92	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 8NPLSm

Small RNA Concentration [pg/μl]:	18,494.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,029.2	Result Flagging Label:	11 % miRNA; Concentration: 2029.20 pg/μl
miRNA / Small RNA Ratio [%]:	11		

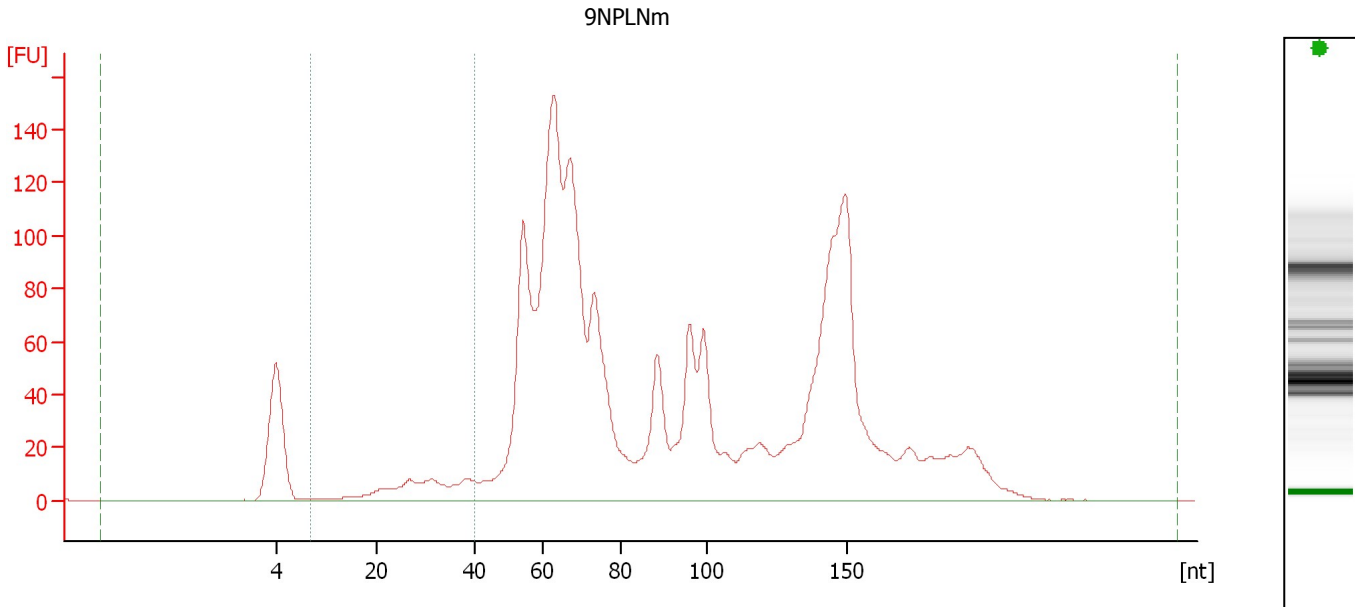
Region table for sample 8 : 8NPLSm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	263	75	39.4	18,494.3	100	
miRNA	10	40	30	23.0	2,029.2	11	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 9NPLNm

Small RNA Concentration [pg/μl]:	20,365.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,099.5	Result Flagging Label:	15 % miRNA; Concentration: 3099.50 pg/μl
miRNA / Small RNA Ratio [%]:	15		

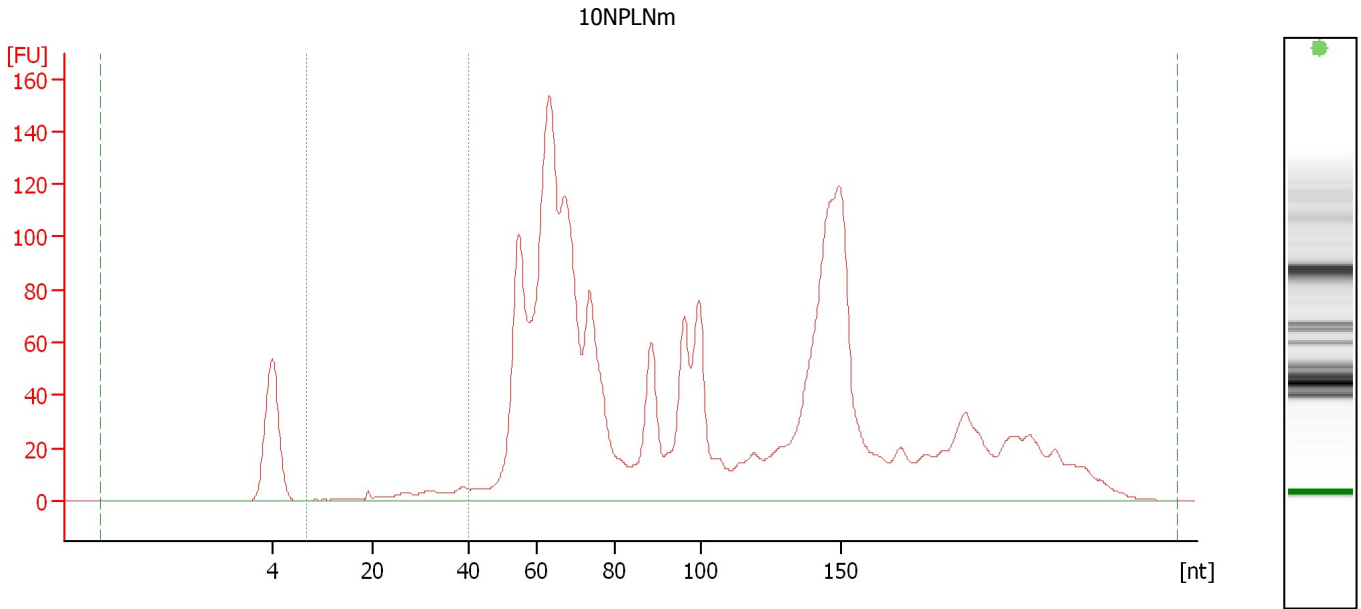
Region table for sample 9 : 9NPLNm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	267	96	48.9	20,365.5	100	
miRNA	10	40	29	24.7	3,099.5	15	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 10NPLNm

Small RNA Concentration [pg/μl]:	18,457.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,320.8	Result Flagging Label:	7 % miRNA; Concentration: 1320.80 pg/μl
miRNA / Small RNA Ratio [%]:	7		

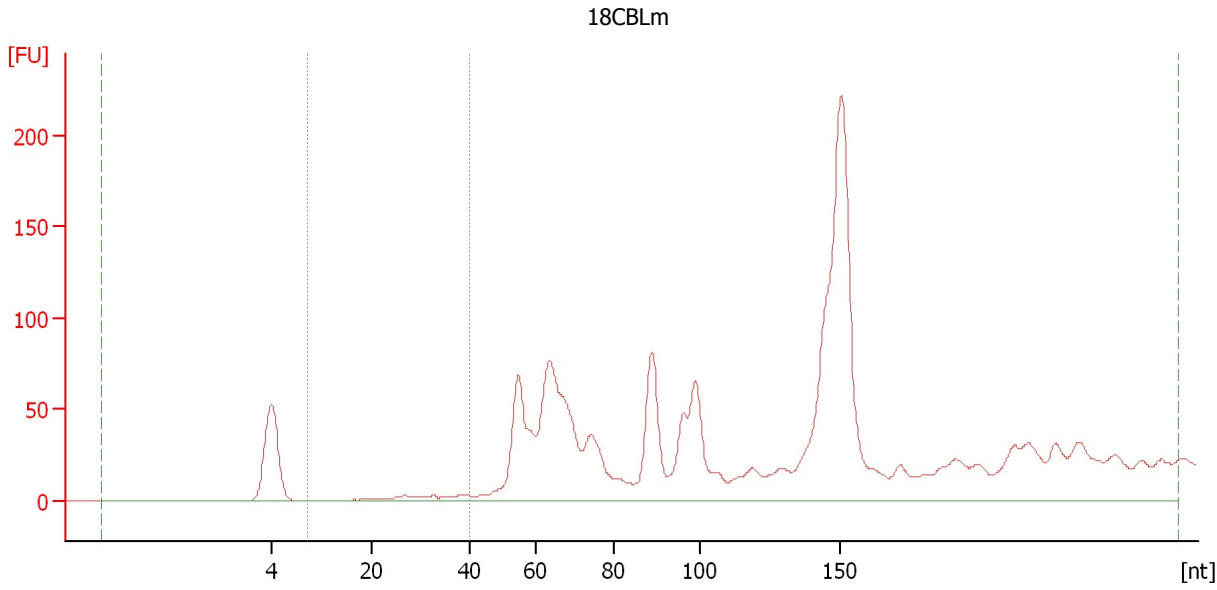
Region table for sample 10 : 10NPLNm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	270	111	51.6	18,457.6	100	
miRNA	10	40	29	24.9	1,320.8	7	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 18CBLm

Small RNA Concentration [pg/μl]:	14,789.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,052.4	Result Flagging Label:	7 % miRNA; Concentration: 1052.40 pg/μl
miRNA / Small RNA Ratio [%]:	7		

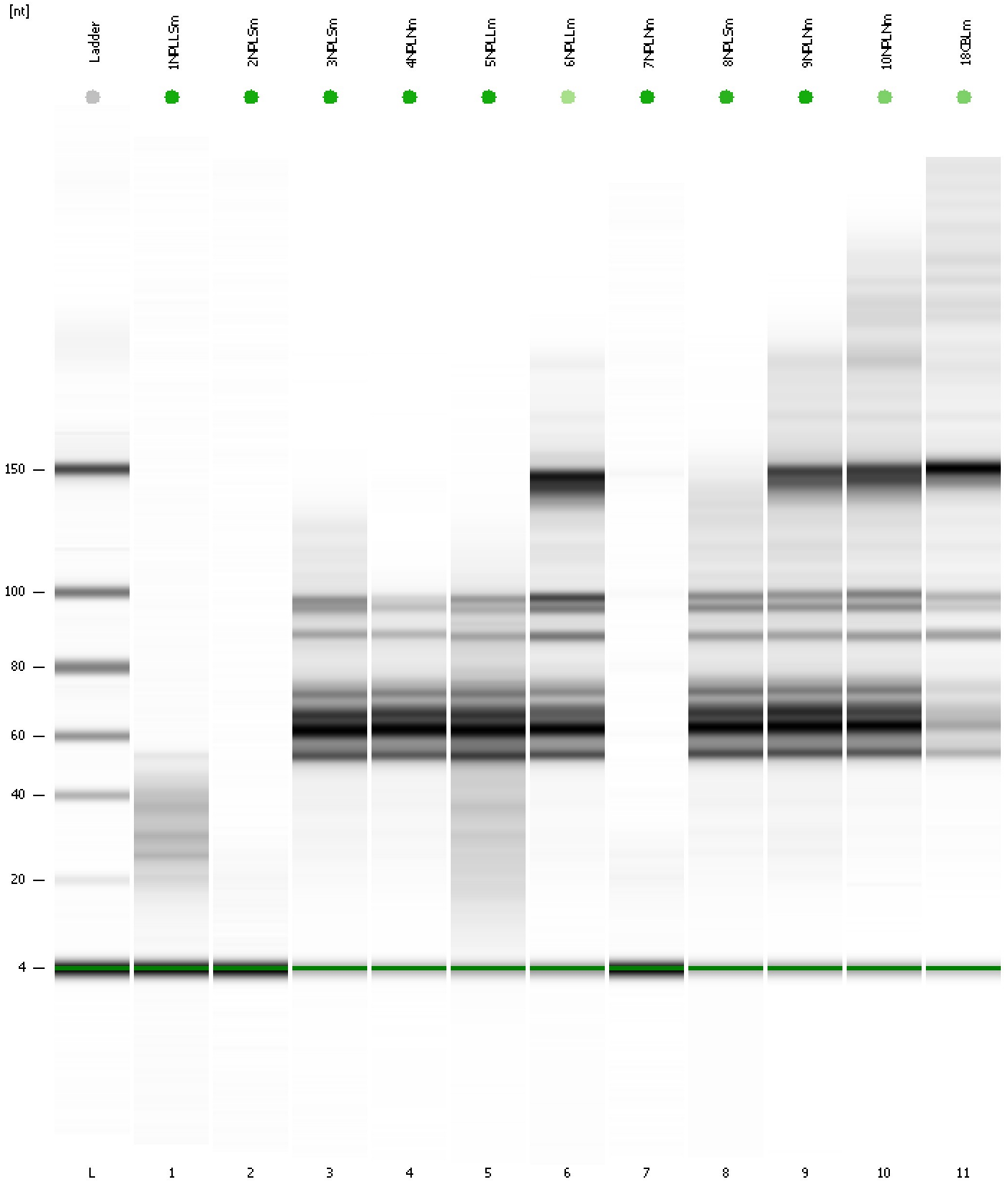
Region table for sample 11 : 18CBLm

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	271	135	49.1	14,789.4	100	
miRNA	10	40	29	24.9	1,052.4	7	

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
Modified: 8/6/2019 12:09:38 PM

Gel Image



Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_005.xad

Created: 8/6/2019 11:16:31 AM
 Modified: 8/6/2019 12:09:38 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		8/6/2019 11:48:27 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_005.xad)		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/6/2019 11:16:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1