

Assay Class: Small RNA  
Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

Created: 5/15/2019 8:43:28 AM  
Modified: 5/15/2019 9:29:23 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

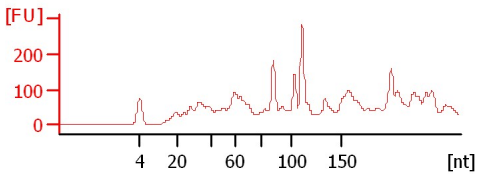
Assay Class: Small RNA  
Version: 1.2  
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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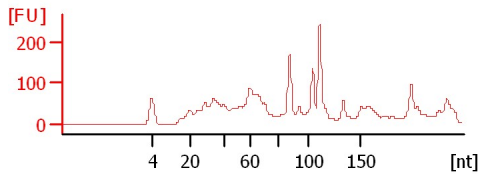
Chip Information:

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

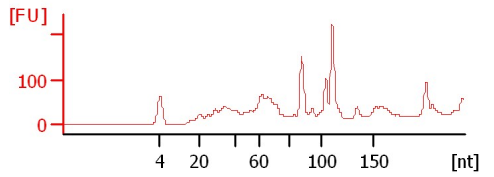
**A**  
40 % miRNA; Concentration: 10066.40 p...



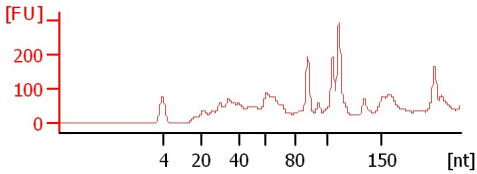
**B**  
48 % miRNA; Concentration: 11617.90 p...



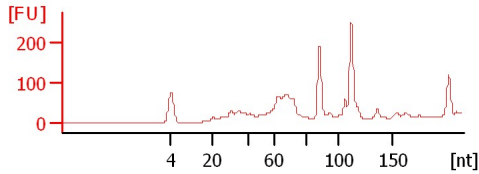
**C**  
42 % miRNA; Concentration: 7394 pg/μl



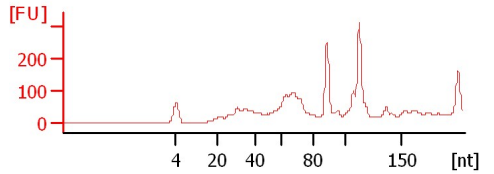
**D**  
44 % miRNA; Concentration: 10158.60 p...



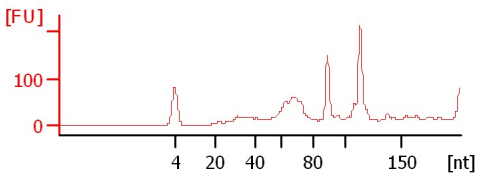
**A'''**  
36 % miRNA; Concentration: 4413.50 pg/μl



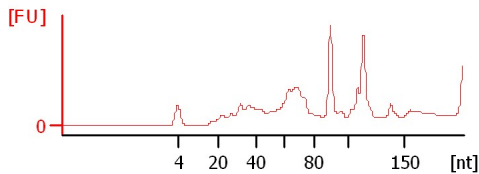
**B'''**  
39 % miRNA; Concentration: 8023.30 pg/μl



**C'''**  
31 % miRNA; Concentration: 2545 pg/μl












**D'''**  
42 % miRNA; Concentration: 10882.30 p...



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

Sample Name	Sample Comment	Status	Result Label	Result Color
A		✓	40 % miRNA; Concentration: 10066.40 pg/μl	
B		✓	48 % miRNA; Concentration: 11617.90 pg/μl	
C		✓	42 % miRNA; Concentration: 7394 pg/μl	
D		✓	44 % miRNA; Concentration: 10158.60 pg/μl	
A'''		✓	36 % miRNA; Concentration: 4413.50 pg/μl	
B'''		✓	39 % miRNA; Concentration: 8023.30 pg/μl	
C'''		✓	31 % miRNA; Concentration: 2545 pg/μl	
D'''		✓	42 % miRNA; Concentration: 10882.30 pg/μl	
Ladder		✓	Number of Peaks: 6	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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## 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

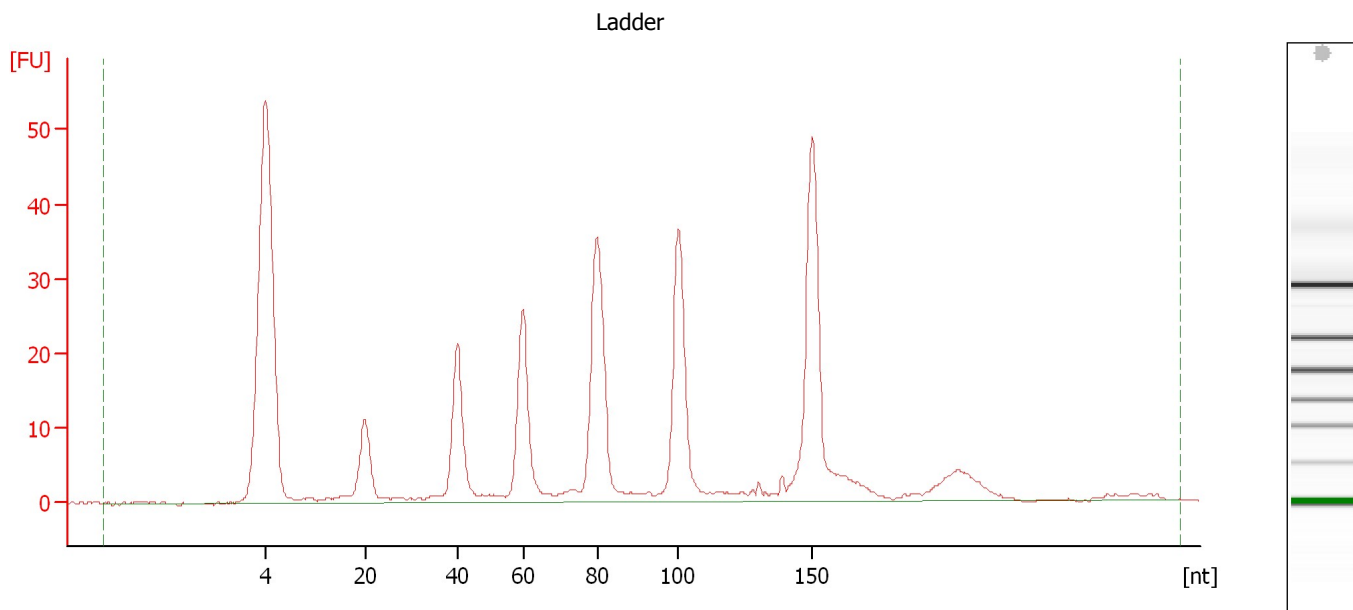
### Ladder

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Result Flagging Color:

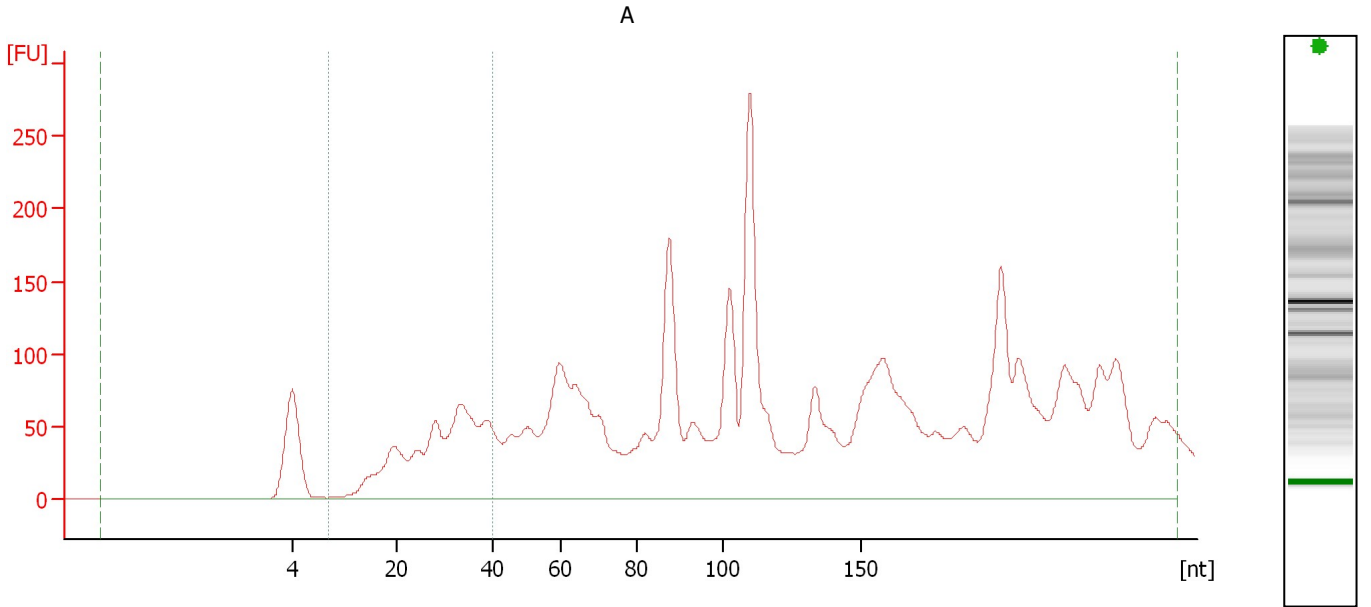
Result Flagging Label:

Number of Peaks: 6

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : A**

Small RNA Concentration [pg/μl]:	25,115.3	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	10,066.4	Result Flagging Label:	40 % miRNA; Concentration: 10066.40 pg/μl
miRNA / Small RNA Ratio [%]:	40		

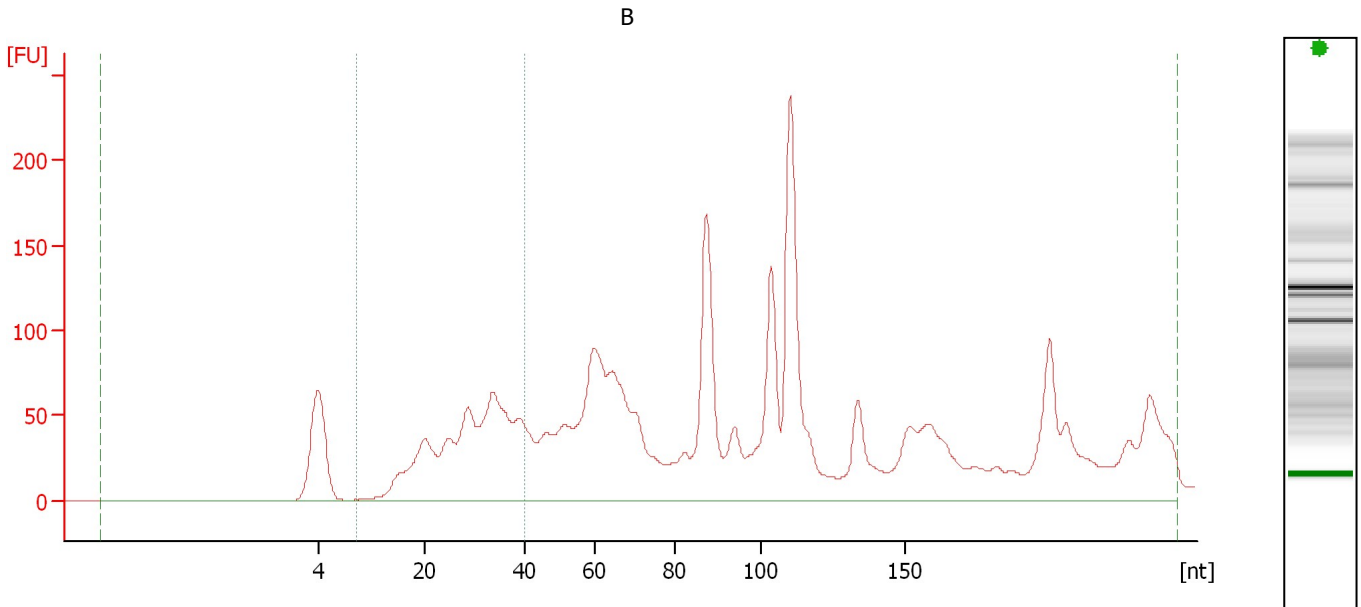
**Region table for sample 1 : A**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	263	131	55.3	25,115.3	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	29	24.9	10,066.4	40	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : B**

Small RNA Concentration [pg/μl]:	24,006.7	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
miRNA Concentration [pg/μl]:	11,617.9	Result Flagging Label:	48 % miRNA; Concentration: 11617.90 pg/μl
miRNA / Small RNA Ratio [%]:	48		

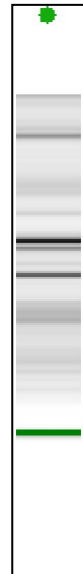
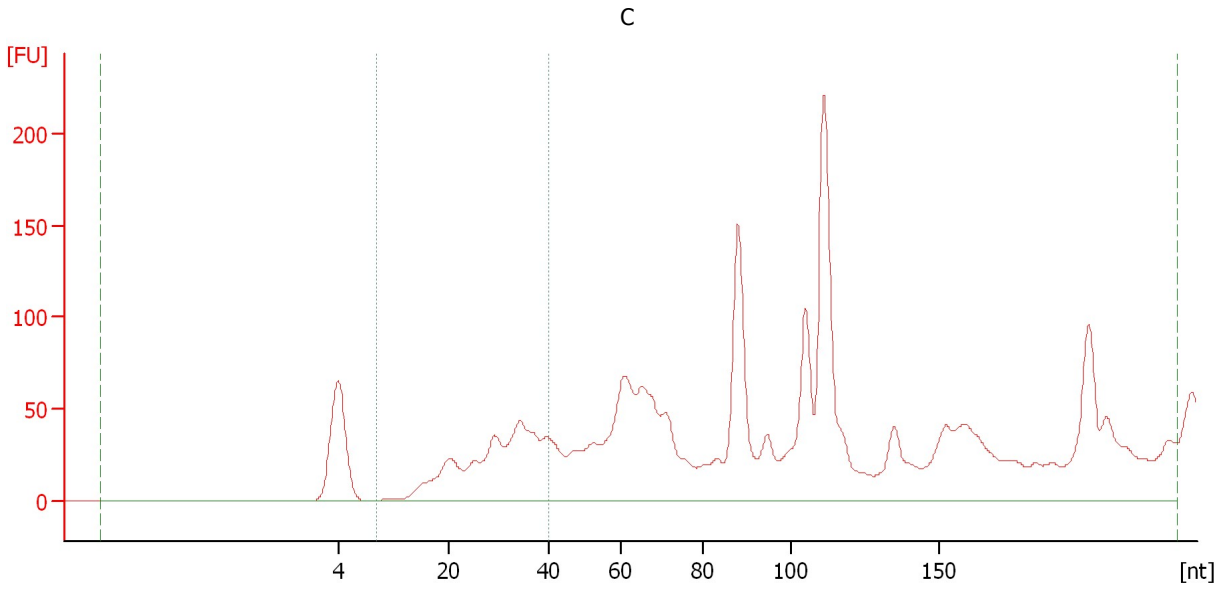
**Region table for sample 2 : B**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	244	105	62.4	24,006.7	100	<span style="background-color: purple; color: black;"> </span>
miRNA	10	40	29	24.2	11,617.9	48	<span style="background-color: green; color: black;"> </span>

Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : C**

Small RNA Concentration [pg/μl]: 17,726.1  
 miRNA Concentration [pg/μl]: 7,394.0  
 miRNA / Small RNA Ratio [%]: 42

Result Flagging Color: ████████  
 Result Flagging Label: 42 % miRNA;  
 Concentration: 7394  
 pg/μl

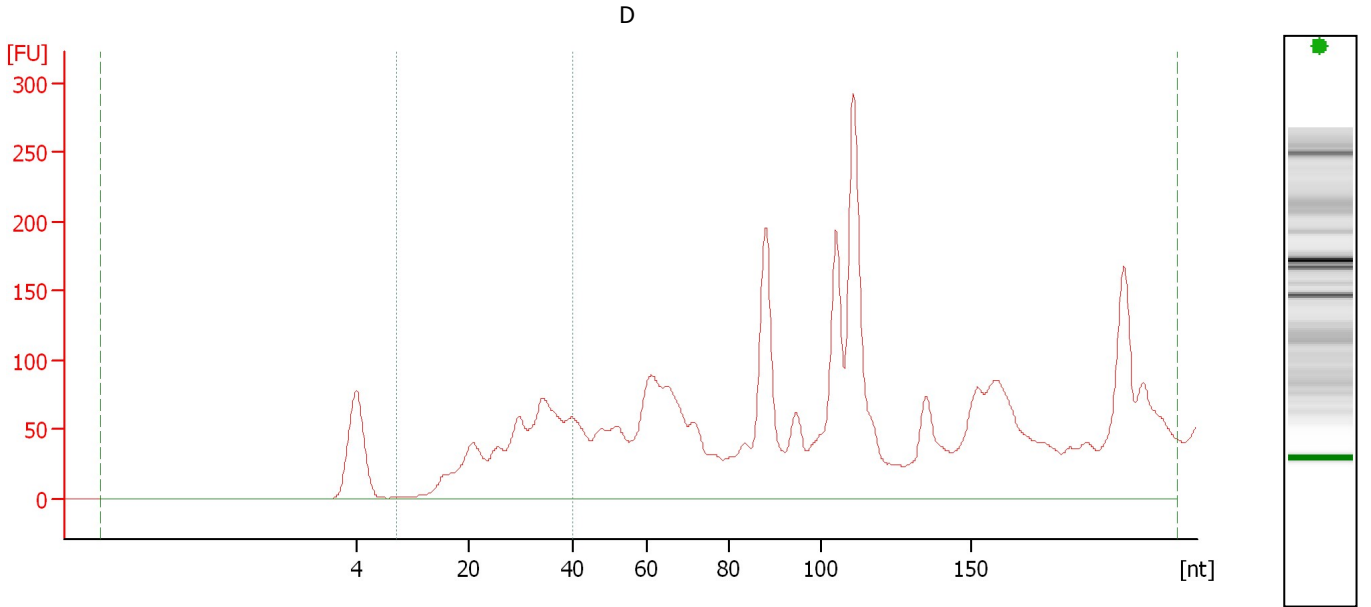
**Region table for sample 3 : C**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	231	106	57.5	17,726.1	100	<span style="background-color: purple; color: purple;">████</span>
miRNA	10	40	29	23.4	7,394.0	42	<span style="background-color: green; color: green;">████</span>

Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : D**

Small RNA Concentration [pg/μl]:	23,256.8	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	10,158.6	Result Flagging Label:	44 % miRNA; Concentration: 10158.60 pg/μl
miRNA / Small RNA Ratio [%]:	44		

**Region table for sample 4 : D**

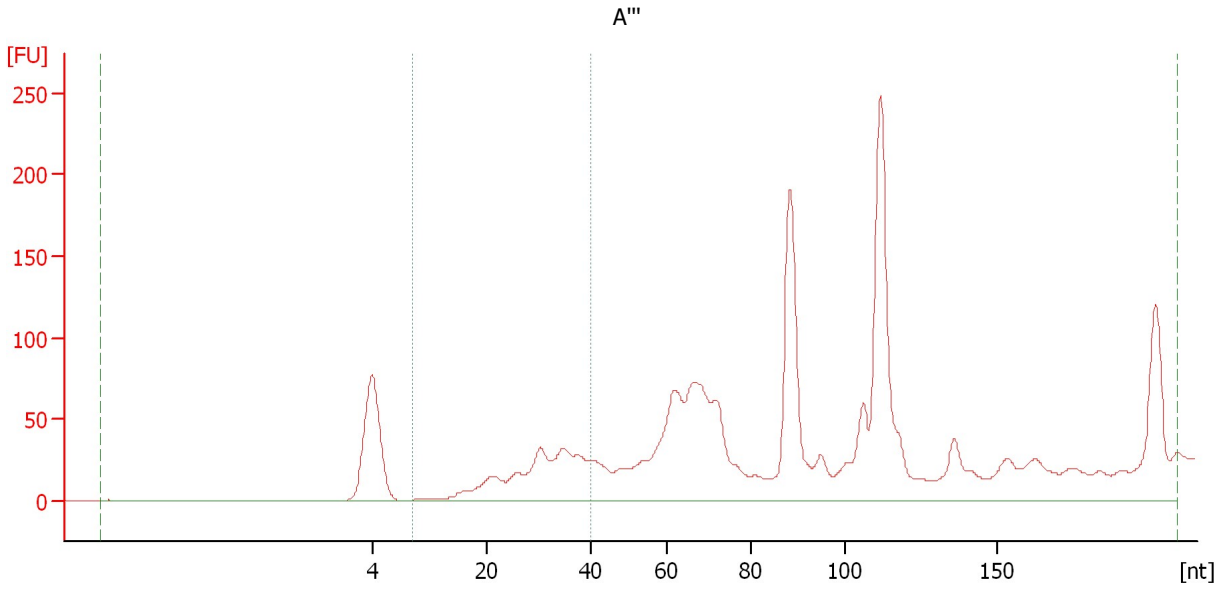
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	218	107	55.3	23,256.8	100	<span style="background-color: #800040; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	29	23.4	10,158.6	44	<span style="background-color: #006400; width: 15px; height: 10px; display: inline-block;"></span>



Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : A'''**

Small RNA Concentration [pg/μl]: 12,093.3  
 miRNA Concentration [pg/μl]: 4,413.5  
 miRNA / Small RNA Ratio [%]: 36

Result Flagging Color:   
 Result Flagging Label: 36 % miRNA;  
 Concentration:  
 4413.50 pg/μl

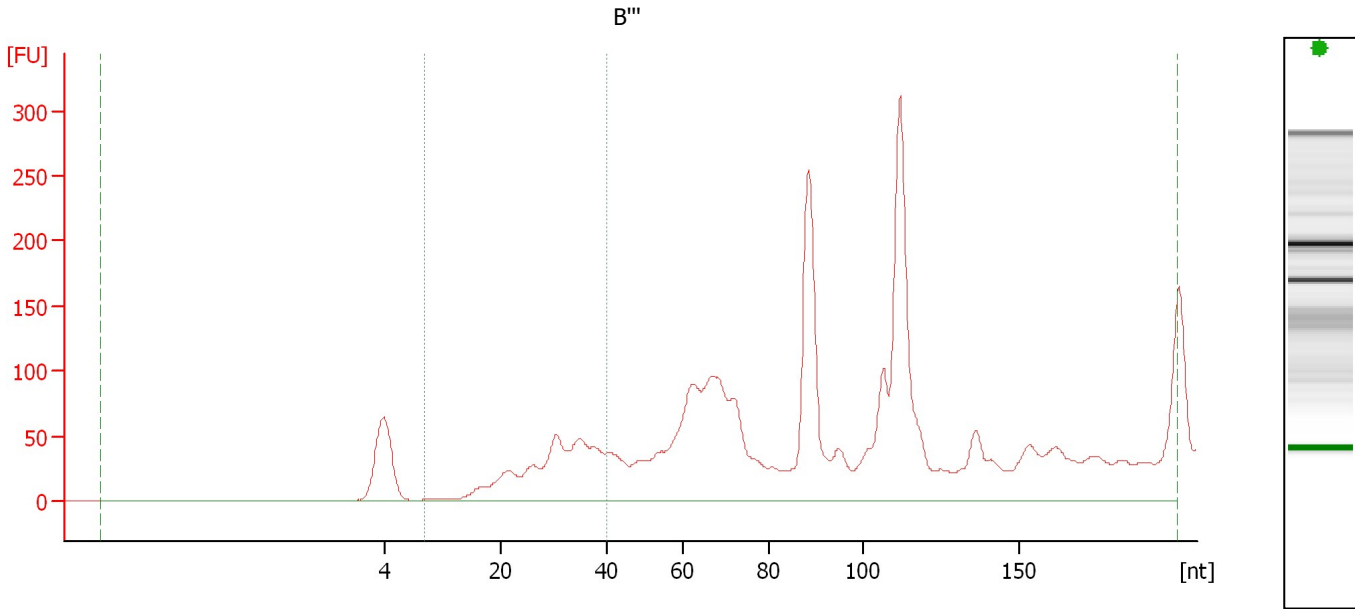
**Region table for sample 5 : A'''**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	209	97	55.8	12,093.3	100	<span style="background-color: purple; display: inline-block; width: 15px; height: 10px;"></span>
miRNA	10	40	30	21.7	4,413.5	36	<span style="background-color: green; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : B'''**

Small RNA Concentration [pg/μl]:	20,771.1	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	8,023.3	Result Flagging Label:	39 % miRNA; Concentration: 8023.30 pg/μl
miRNA / Small RNA Ratio [%]:	39		

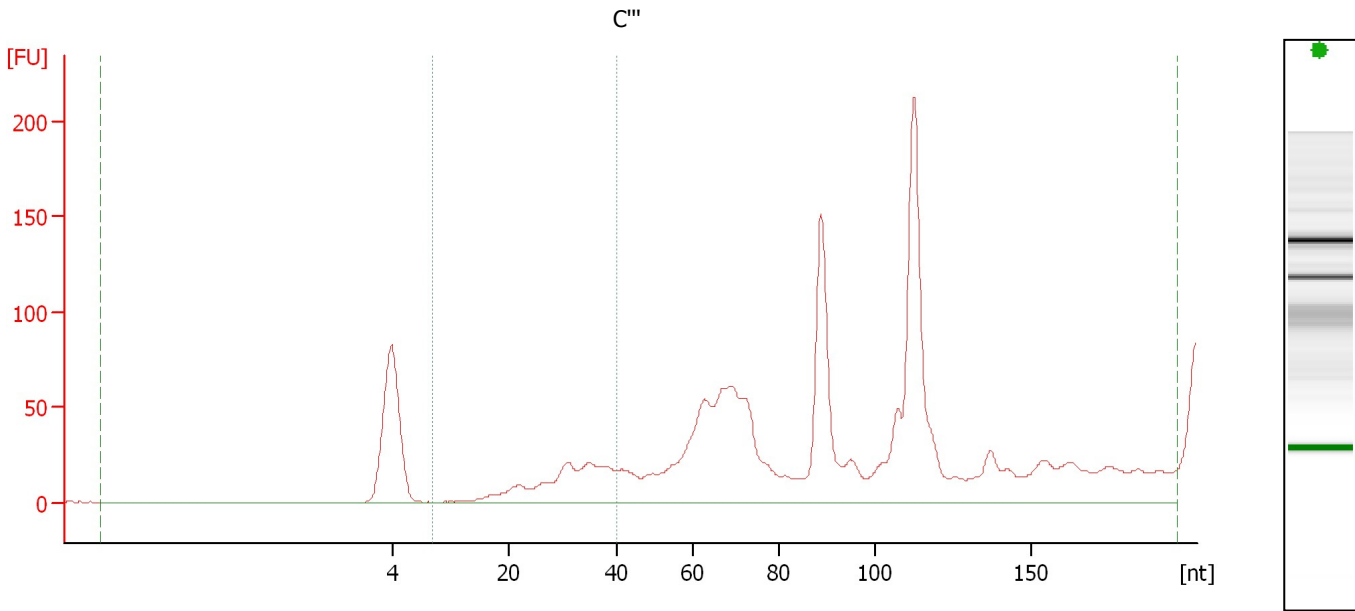
**Region table for sample 6 : B'''**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	201	95	51.8	20,771.1	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	30	22.2	8,023.3	39	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : C'''**

Small RNA Concentration [pg/μl]: 8,282.7  
 miRNA Concentration [pg/μl]: 2,545.0  
 miRNA / Small RNA Ratio [%]: 31

Result Flagging Color:   
 Result Flagging Label: 31 % miRNA;  
 Concentration: 2545  
 pg/μl

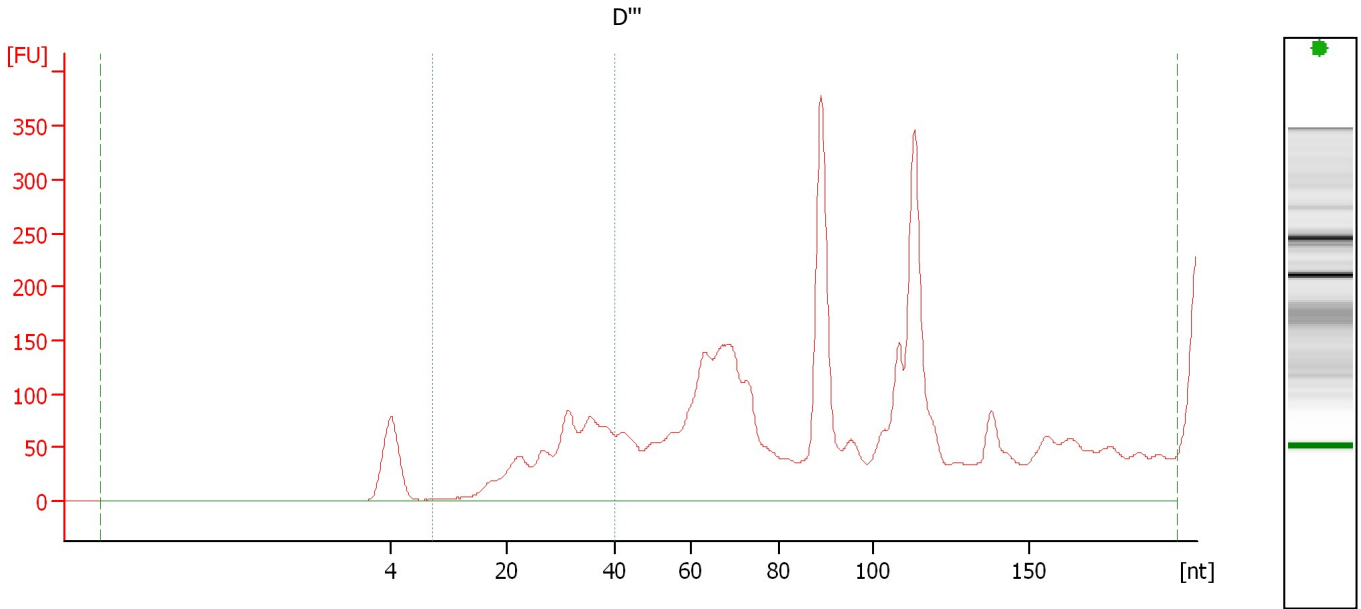
**Region table for sample 7 : C'''**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	196	90	52.6	8,282.7	100	<span style="background-color: #800000; display: inline-block; width: 15px; height: 10px;"></span>
miRNA	10	40	31	20.5	2,545.0	31	<span style="background-color: #008000; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Small RNA  
 Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : D'''**

Small RNA Concentration [pg/μl]: 26,166.3  
 miRNA Concentration [pg/μl]: 10,882.3  
 miRNA / Small RNA Ratio [%]: 42

Result Flagging Color:             
 Result Flagging Label: 42 % miRNA;  
 Concentration:  
 10882.30 pg/μl

**Region table for sample 8 : D'''**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	197	90	51.8	26,166.3	100	<span style="background-color: maroon; color: black;">          </span>
miRNA	10	40	30	22.4	10,882.3	42	<span style="background-color: green; color: black;">          </span>

Assay Class: Small RNA  
Data Path: C:\...ert\data\2019-05-15\2019-05-15\_003\_BrendanTinsley\_miRNA.xad

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**Gel Image**

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**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		5/15/2019 9:14:06 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\2019-05-15\2019-05-15_003.xad)		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/15/2019 8:43:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1