

Assay Class: Small RNA  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

Created: 3/28/2017 3:28:08 PM  
Modified: 3/28/2017 4:00:05 PM

**Electrophoresis File Run Summary**

Instrument Information:

Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

Assay Information:

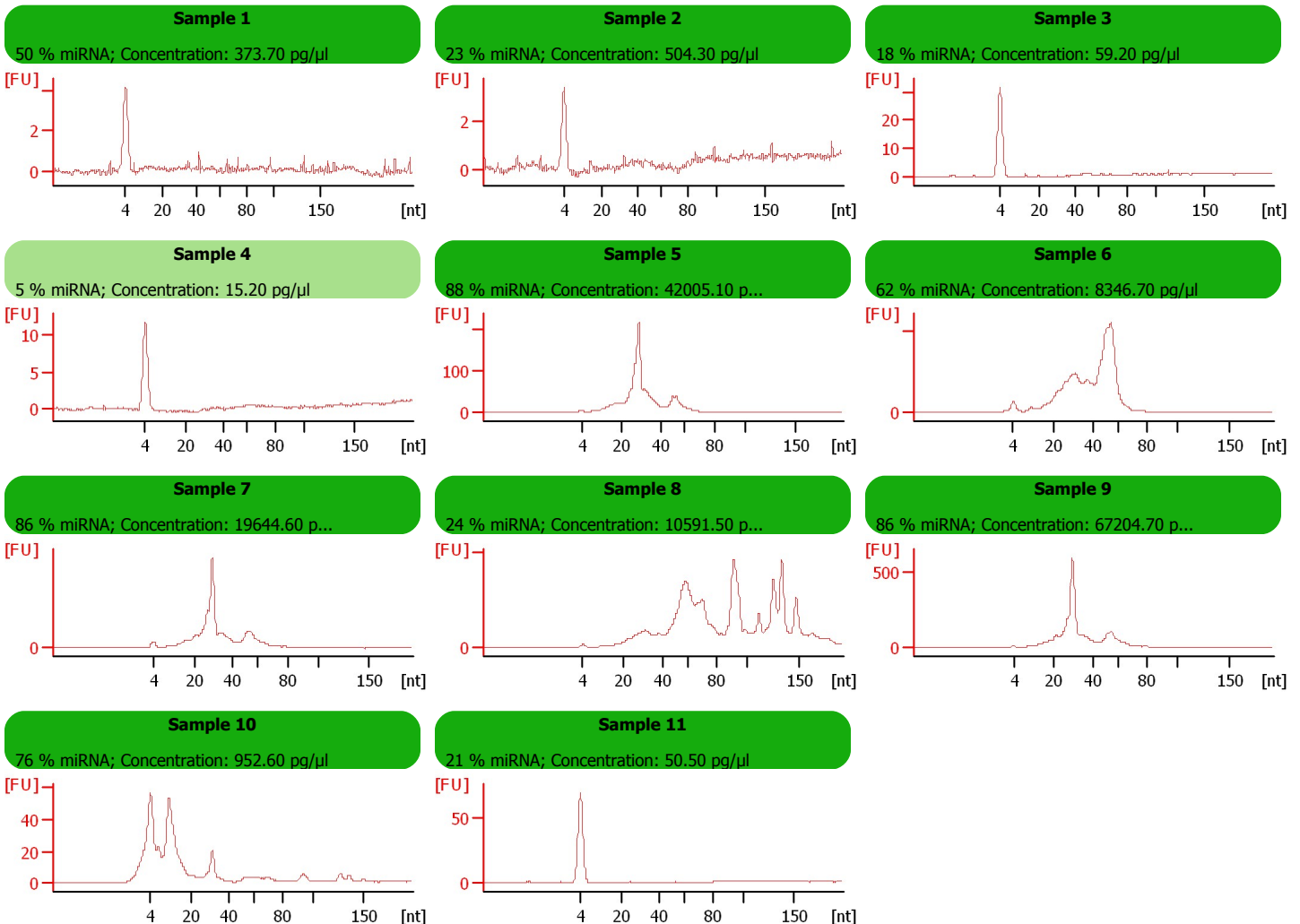
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Small RNA Series II.xsy

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:



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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	50 % miRNA; Concentration: 373.70 pg/μl	
Sample 2		✓	23 % miRNA; Concentration: 504.30 pg/μl	
Sample 3		✓	18 % miRNA; Concentration: 59.20 pg/μl	
Sample 4		✓	5 % miRNA; Concentration: 15.20 pg/μl	
Sample 5		✓	88 % miRNA; Concentration: 42005.10 pg/μl	
Sample 6		✓	62 % miRNA; Concentration: 8346.70 pg/μl	
Sample 7		✓	86 % miRNA; Concentration: 19644.60 pg/μl	
Sample 8		✓	24 % miRNA; Concentration: 10591.50 pg/μl	
Sample 9		✓	86 % miRNA; Concentration: 67204.70 pg/μl	
Sample 10		✓	76 % miRNA; Concentration: 952.60 pg/μl	
Sample 11		✓	21 % miRNA; Concentration: 50.50 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

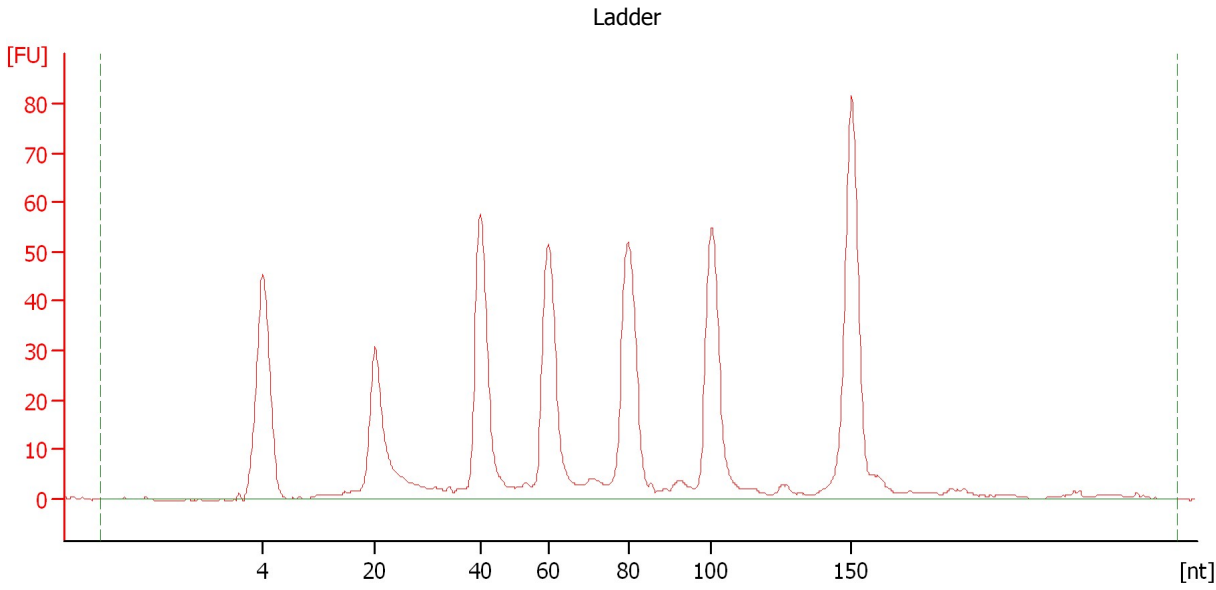
**Ladder**

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:

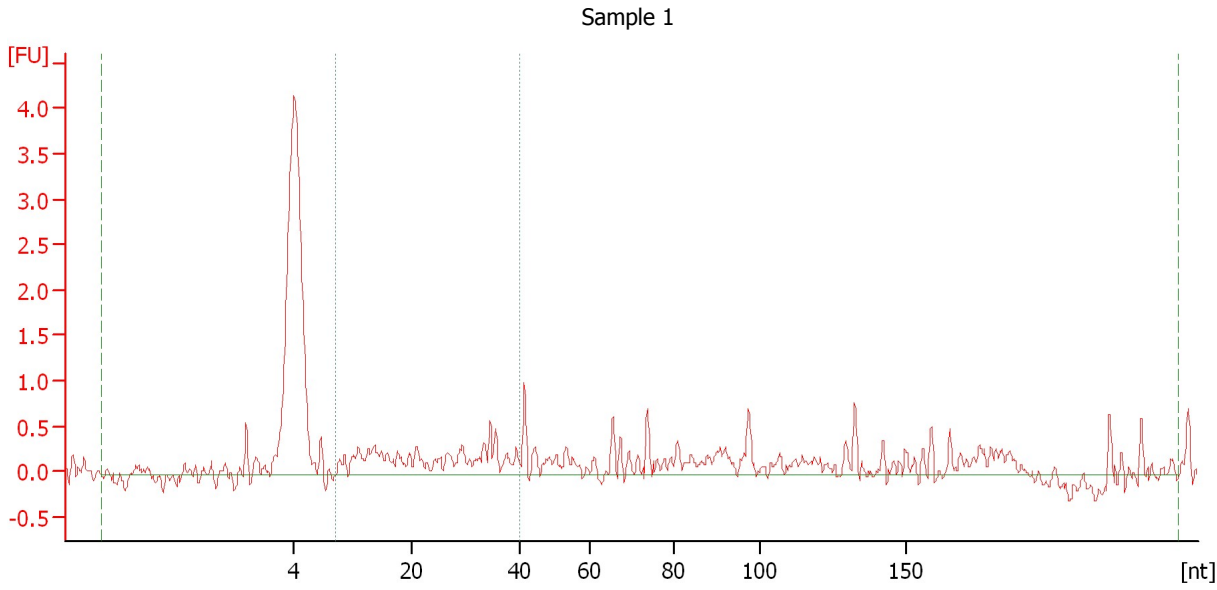
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Sample 1**

Small RNA Concentration [pg/μl]:	746.3	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	373.7	Result Flagging Label:	50 % miRNA; Concentration: 373.70 pg/μl
miRNA / Small RNA Ratio [%]:	50		

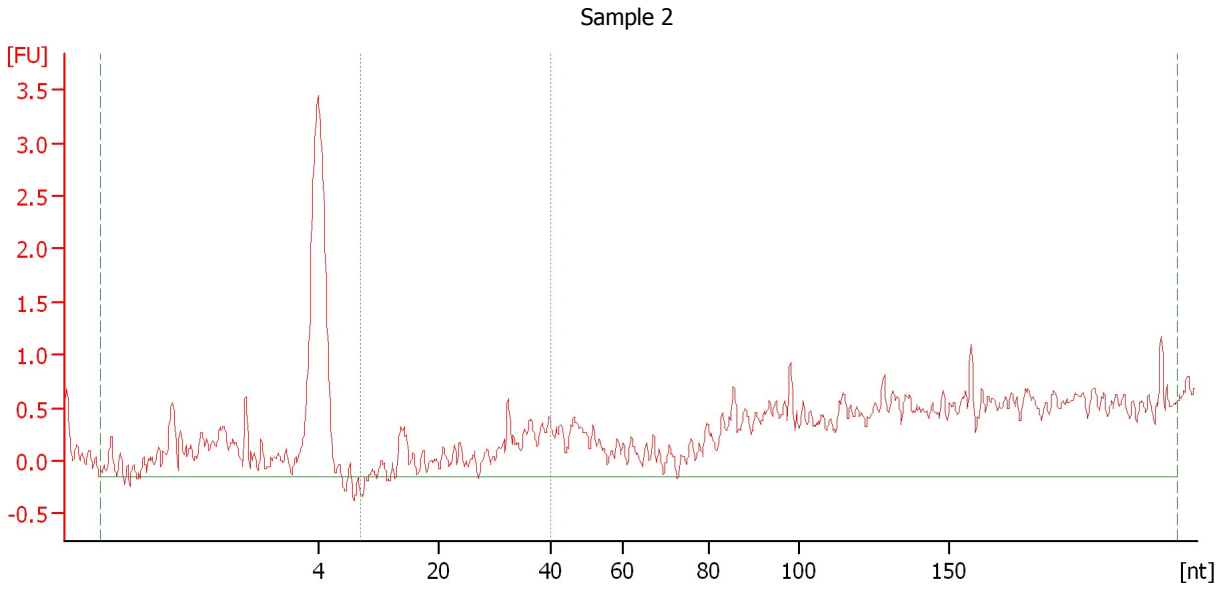
**Region table for sample 1 : Sample 1**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	243	57	100.0	746.3	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	24	37.0	373.7	50	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Sample 2**

Small RNA Concentration [pg/μl]:	2,203.7	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	504.3	Result Flagging Label:	23 % miRNA; Concentration: 504.30 pg/μl
miRNA / Small RNA Ratio [%]:	23		

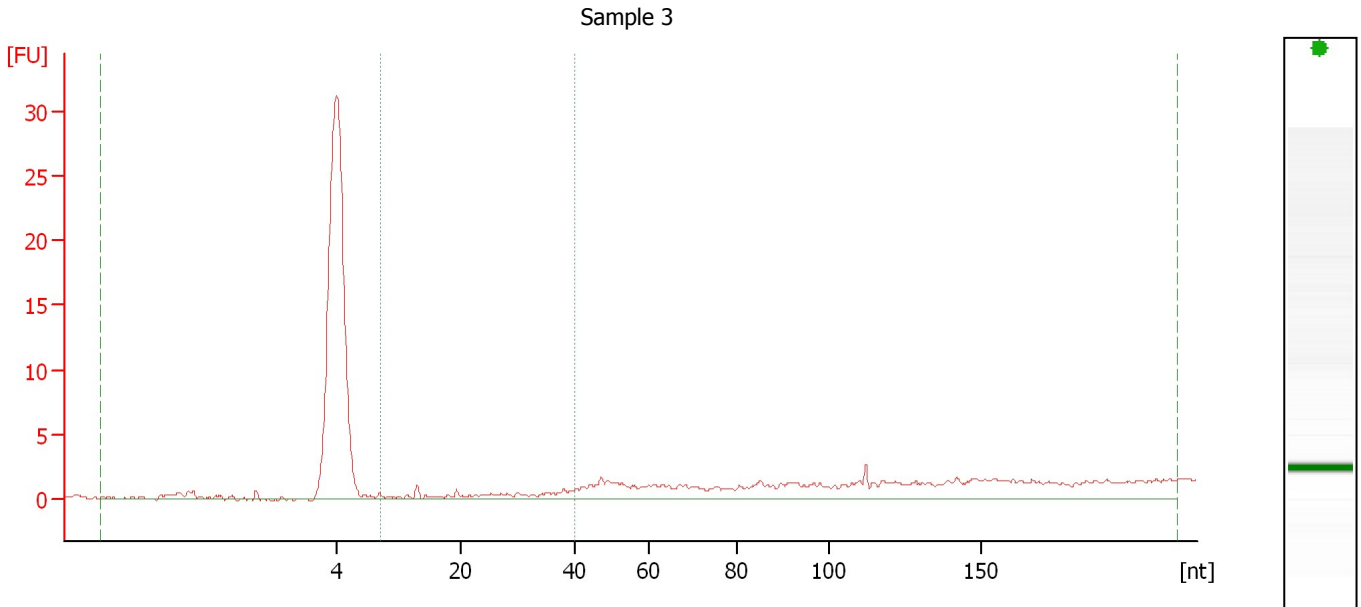
**Region table for sample 2 : Sample 2**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	226	102	72.6	2,203.7	100	<span style="background-color: maroon; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	30.1	504.3	23	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Sample 3**

Small RNA Concentration [pg/μl]:	330.4	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
miRNA Concentration [pg/μl]:	59.2	Result Flagging Label:	18 % miRNA; Concentration: 59.20 pg/μl
miRNA / Small RNA Ratio [%]:	18		

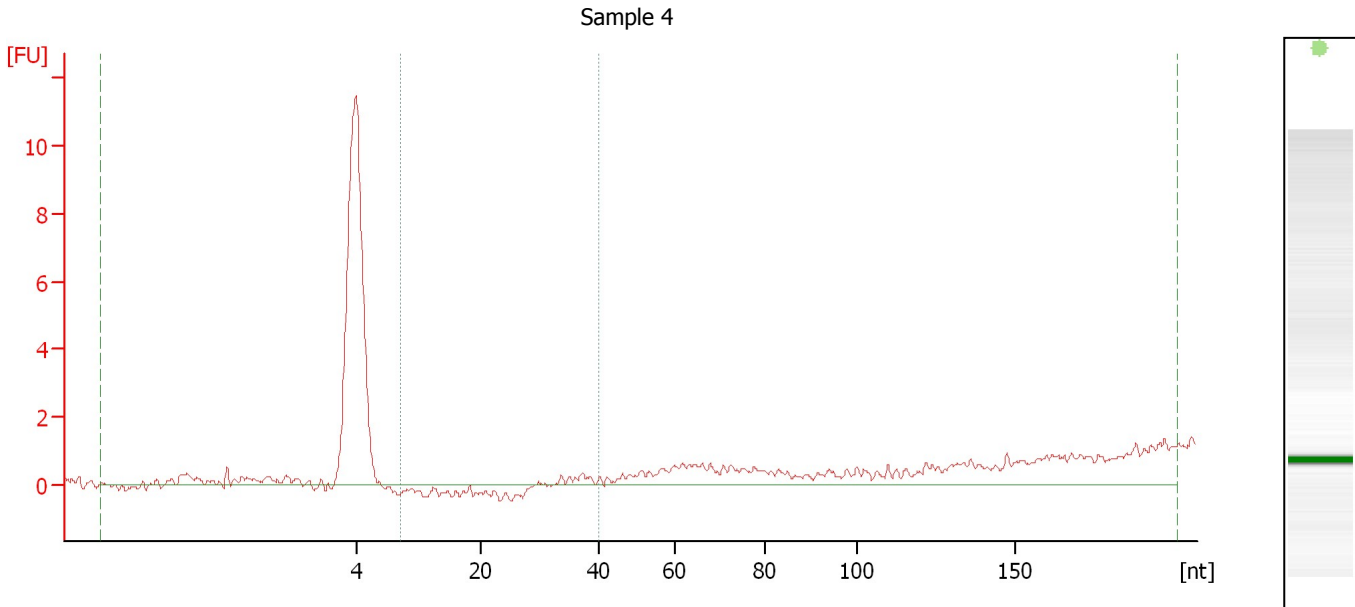
**Region table for sample 3 : Sample 3**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	213	68	100.0	330.4	100	<span style="background-color: purple; color: black;"> </span>
miRNA	10	40	27	33.9	59.2	18	<span style="background-color: green; color: black;"> </span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Sample 4**

Small RNA Concentration [pg/μl]:	328.3	Result Flagging Color:	<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
miRNA Concentration [pg/μl]:	15.2	Result Flagging Label:	5 % miRNA; Concentration: 15.20 pg/μl
miRNA / Small RNA Ratio [%]:	5		

**Region table for sample 4 : Sample 4**

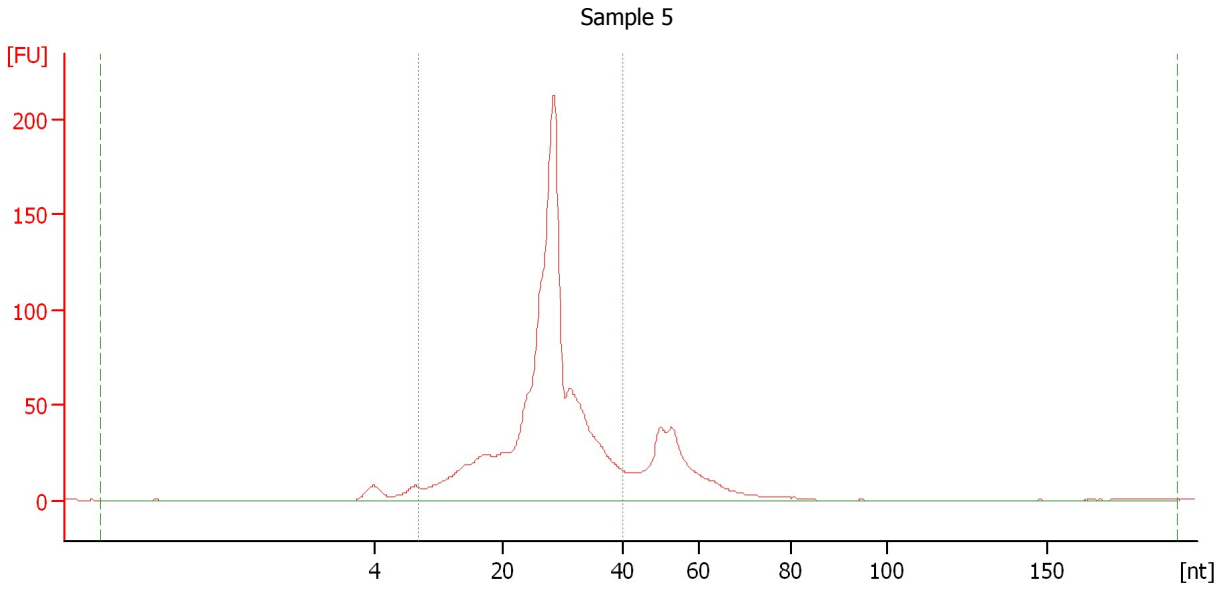
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	201	77	95.7	328.3	100	<span style="background-color: #800000; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>
miRNA	10	40	36	5.9	15.2	5	<span style="background-color: #008000; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>



Assay Class: Small RNA  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Sample 5**

Small RNA Concentration [pg/μl]:	47,509.5	Result Flagging Color:	<span style="background-color: green; color: black;">          </span>
miRNA Concentration [pg/μl]:	42,005.1	Result Flagging Label:	88 % miRNA; Concentration: 42005.10 pg/μl
miRNA / Small RNA Ratio [%]:	88		

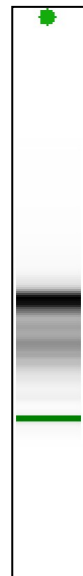
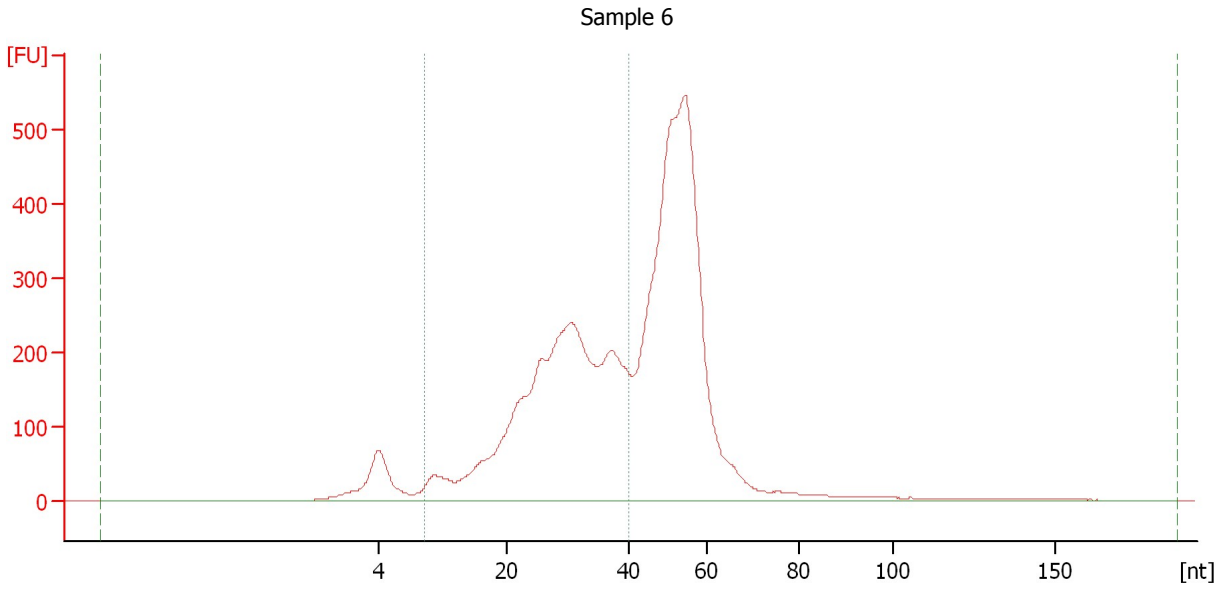
**Region table for sample 5 : Sample 5**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	190	33	52.9	47,509.5	100	<span style="background-color: purple; color: black;">          </span>
miRNA	10	40	27	22.5	42,005.1	88	<span style="background-color: green; color: black;">          </span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Sample 6**

Small RNA Concentration [pg/μl]:	13,394.7	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	8,346.7	Result Flagging Label:	62 % miRNA; Concentration: 8346.70 pg/μl
miRNA / Small RNA Ratio [%]:	62		

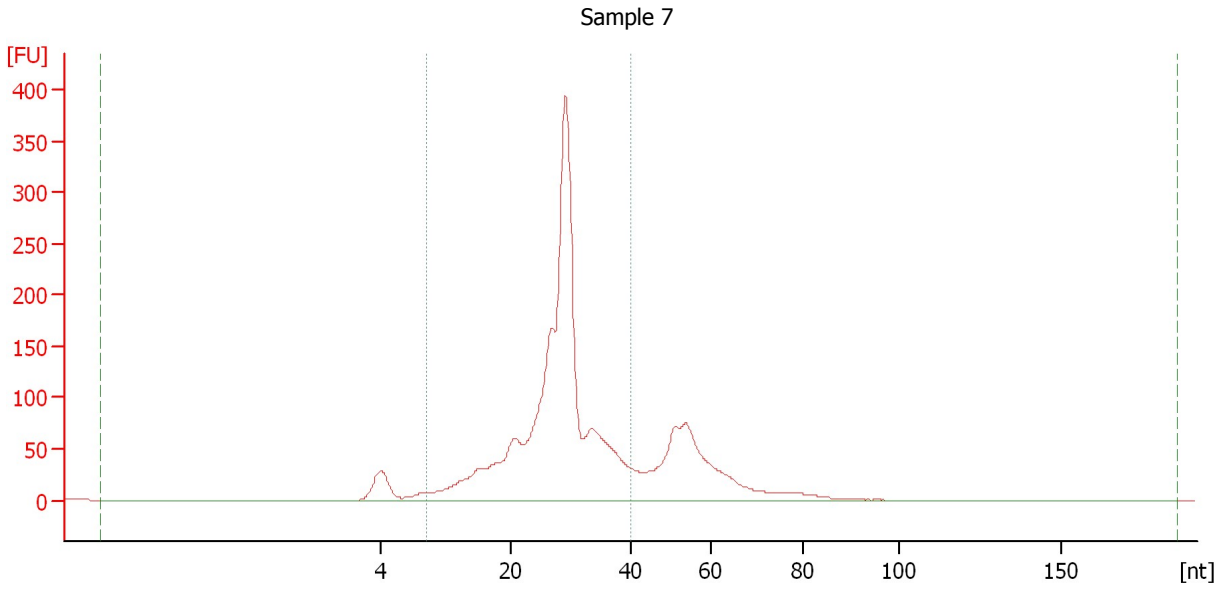
**Region table for sample 6 : Sample 6**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	187	42	44.0	13,394.6	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	25.4	8,346.7	62	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Sample 7**

Small RNA Concentration [pg/μl]:	22,725.1	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	19,644.6	Result Flagging Label:	86 % miRNA; Concentration: 19644.60 pg/μl
miRNA / Small RNA Ratio [%]:	86		

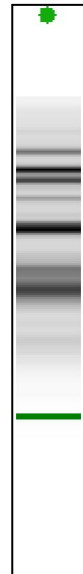
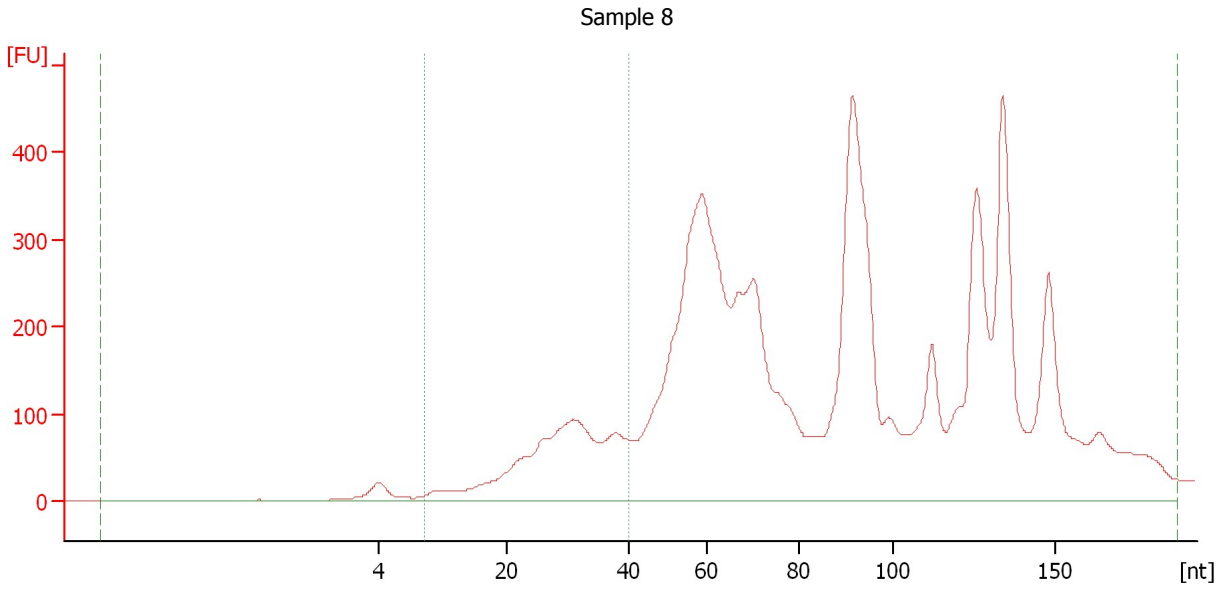
**Region table for sample 7 : Sample 7**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	186	34	44.9	22,725.1	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	27	21.7	19,644.6	86	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Sample 8**

Small RNA Concentration [pg/μl]:	43,489.8	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
miRNA Concentration [pg/μl]:	10,591.5	Result Flagging Label:	24 % miRNA; Concentration: 10591.50 pg/μl
miRNA / Small RNA Ratio [%]:	24		

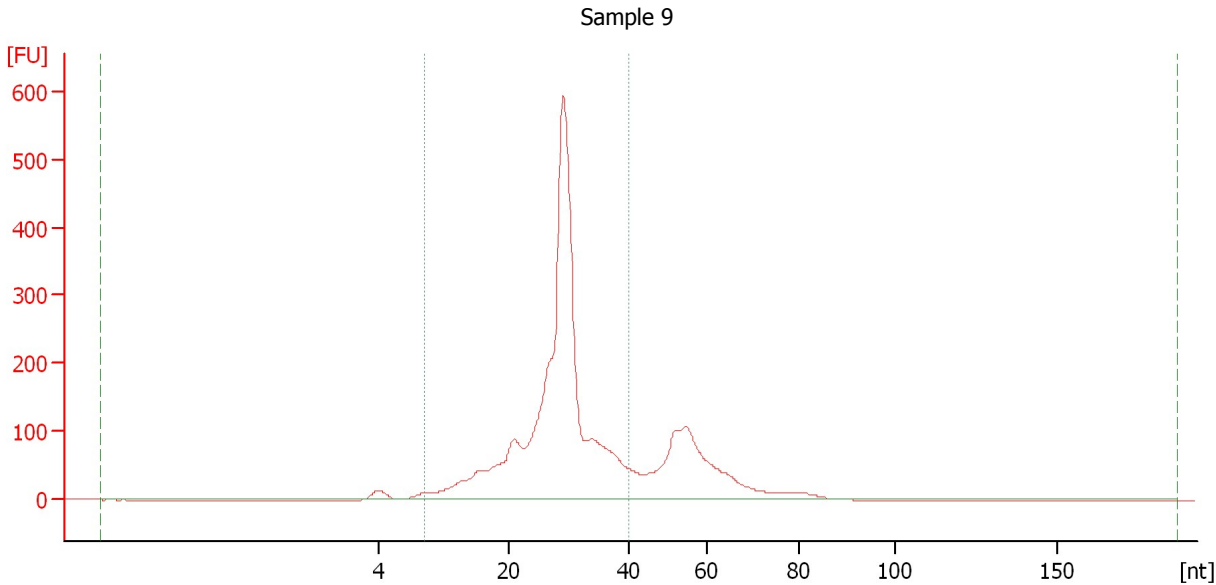
**Region table for sample 8 : Sample 8**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	187	90	45.4	43,489.8	100	<span style="background-color: maroon; color: black;"> </span>
miRNA	10	40	29	25.2	10,591.5	24	<span style="background-color: green; color: black;"> </span>

Assay Class: Small RNA  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-28\2017-03-28\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Sample 9**

Small RNA Concentration [pg/μl]:	77,737.5	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	67,204.7	Result Flagging Label:	86 % miRNA; Concentration: 67204.70 pg/μl
miRNA / Small RNA Ratio [%]:	86		

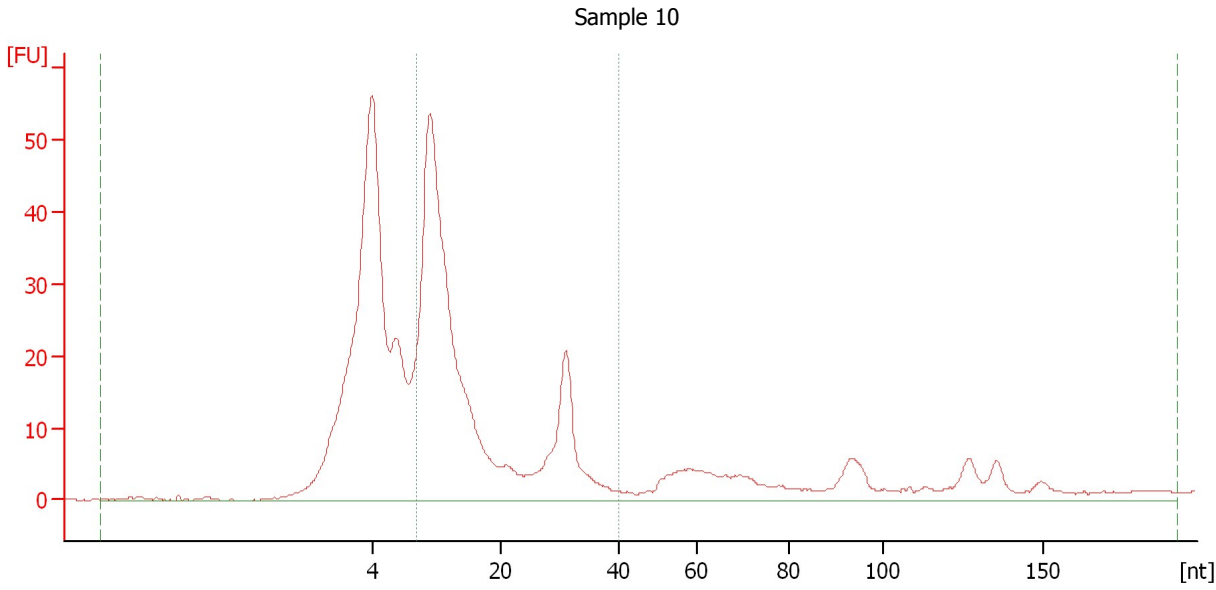
**Region table for sample 9 : Sample 9**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	187	35	42.4	77,737.5	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	28	21.0	67,204.7	86	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Sample 10**

Small RNA Concentration [pg/μl]:	1,260.1	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
miRNA Concentration [pg/μl]:	952.6	Result Flagging Label:	76 % miRNA; Concentration: 952.60 pg/μl
miRNA / Small RNA Ratio [%]:	76		

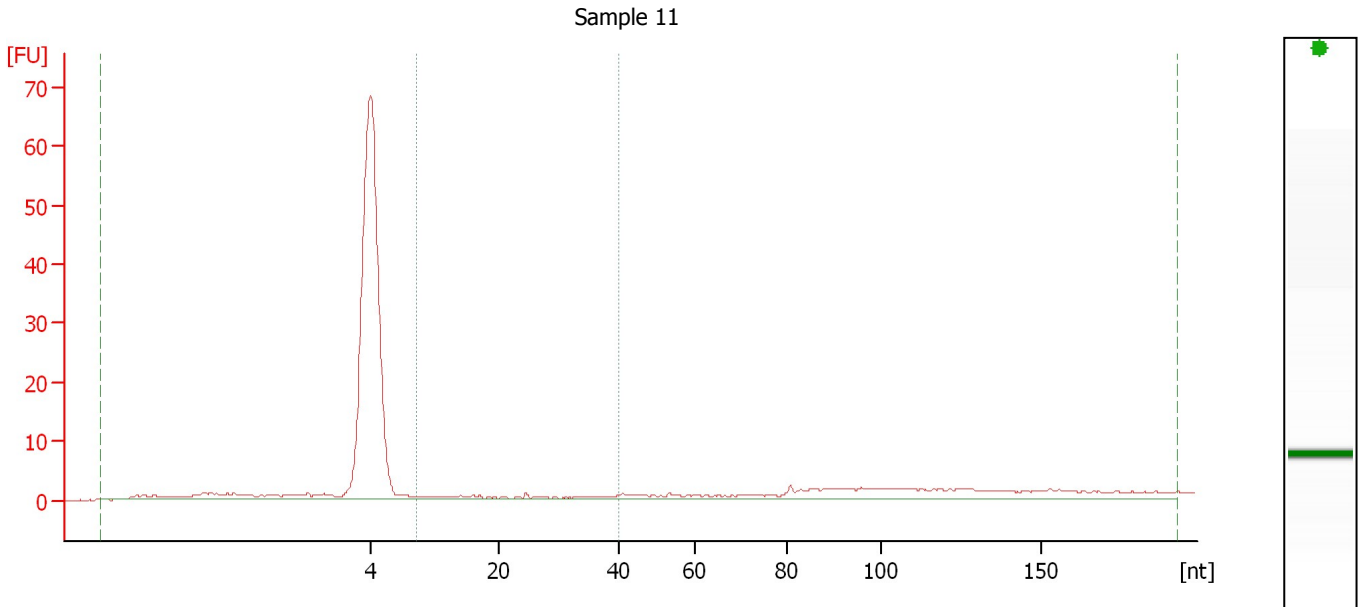
**Region table for sample 10 : Sample 10**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	191	29	100.0	1,260.1	100	<span style="background-color: purple; color: black;"> </span>
miRNA	10	40	17	45.5	952.6	76	<span style="background-color: green; color: black;"> </span>

Assay Class: Small RNA  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Sample 11**

Small RNA Concentration [pg/μl]:	245.2	Result Flagging Color:	<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>
miRNA Concentration [pg/μl]:	50.5	Result Flagging Label:	21 % miRNA; Concentration: 50.50 pg/μl
miRNA / Small RNA Ratio [%]:	21		

**Region table for sample 11 : Sample 11**

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	192	41	100.0	245.2	100	<span style="background-color: purple; width: 15px; height: 10px; display: inline-block;"></span>
miRNA	10	40	24	39.0	50.5	21	<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>

Assay Class: Small RNA  
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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		3/28/2017 4:00:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-03-28\2017-03-28_001.xad)		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/28/2017 3:28:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1