

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

Created: 12/15/2016 10:47:03 AM
Modified: 12/15/2016 11:19:03 AM

Electrophoresis File Run Summary

Instrument Information:

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

Assay Information:

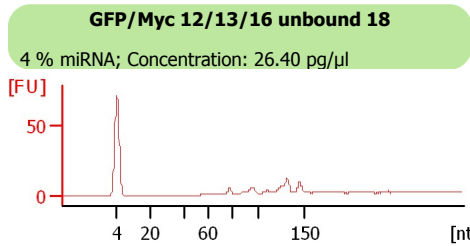
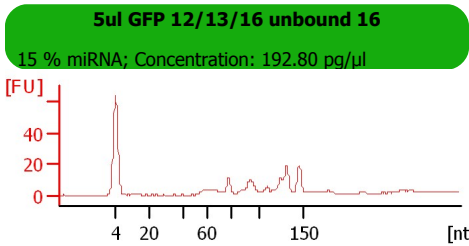
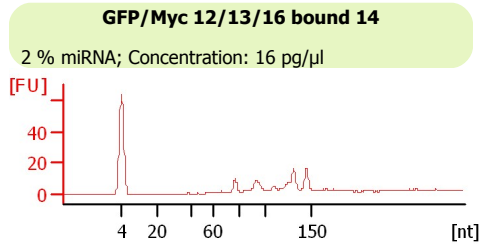
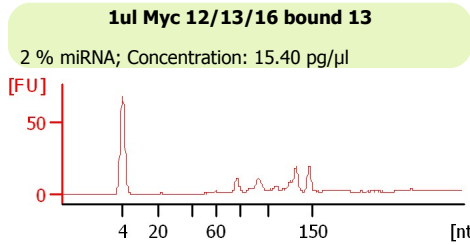
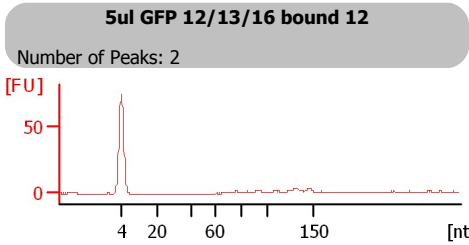
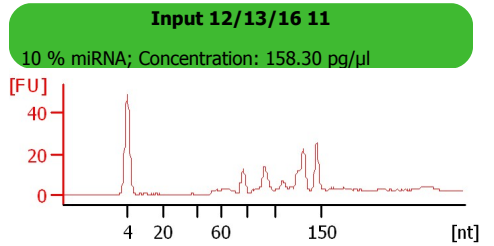
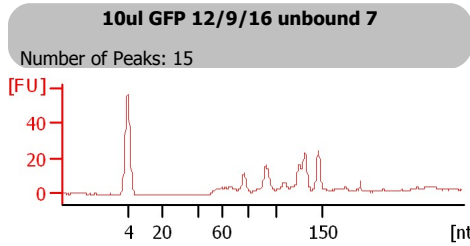
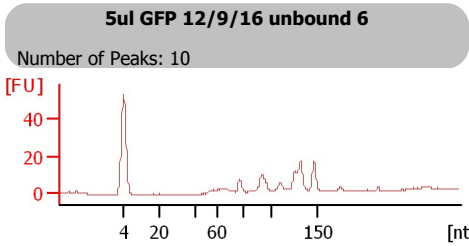
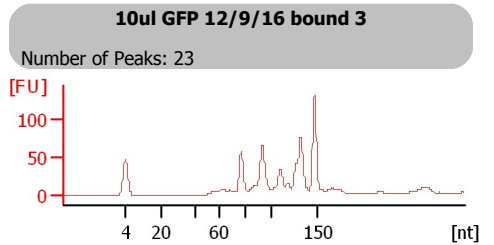
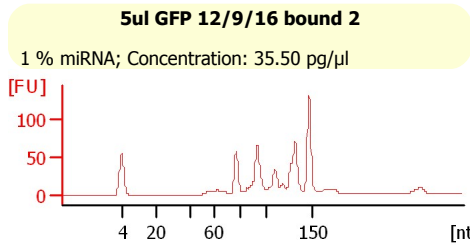
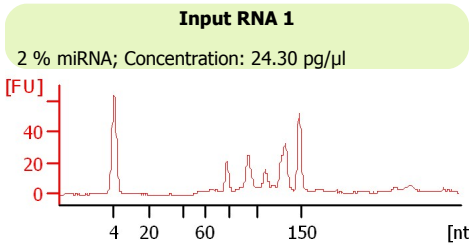
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Small RNA Series II.xsy

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

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Chip Information:

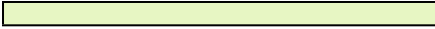






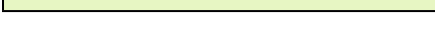
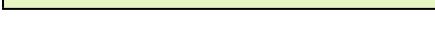



Chip Lot #:
Reagent Kit Lot #:
Chip Comments:



Assay Class: Small RNA
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Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
Input RNA 1		✓	2 % miRNA; Concentration: 24.30 pg/μl	
5ul GFP 12/9/16 bound 2		✓	1 % miRNA; Concentration: 35.50 pg/μl	
10ul GFP 12/9/16 bound 3		✓	Number of Peaks: 23	
5ul GFP 12/9/16 unbound 6		✓	Number of Peaks: 10	
10ul GFP 12/9/16 unbound 7		✓	Number of Peaks: 15	
Input 12/13/16 11		✓	10 % miRNA; Concentration: 158.30 pg/μl	
5ul GFP 12/13/16 bound 12		✓	Number of Peaks: 2	
1ul Myc 12/13/16 bound 13		✓	2 % miRNA; Concentration: 15.40 pg/μl	
GFP/Myc 12/13/16 bound 14		✓	2 % miRNA; Concentration: 16 pg/μl	
5ul GFP 12/13/16 unbound 16		✓	15 % miRNA; Concentration: 192.80 pg/μl	
GFP/Myc 12/13/16 unbound 18		✓	4 % miRNA; Concentration: 26.40 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/ μ l] : 2500

Lower Marker Concentration [pg/ μ l] : 500

Upper Marker Concentration [pg/ μ 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

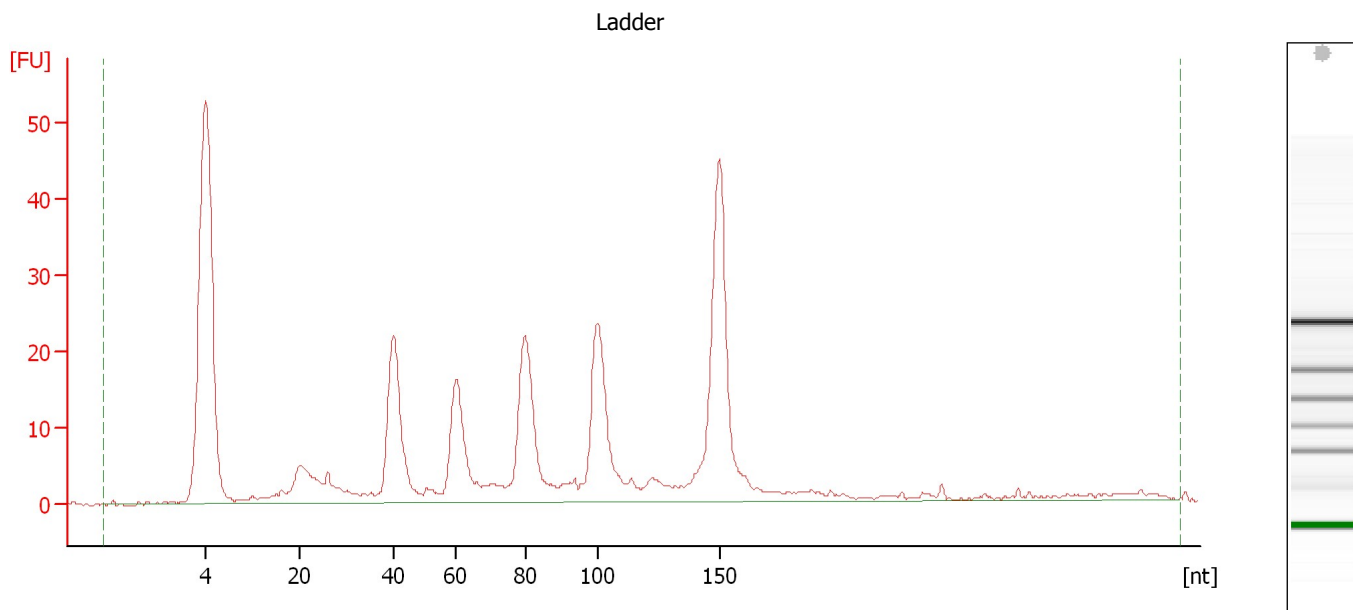
Ladder

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:

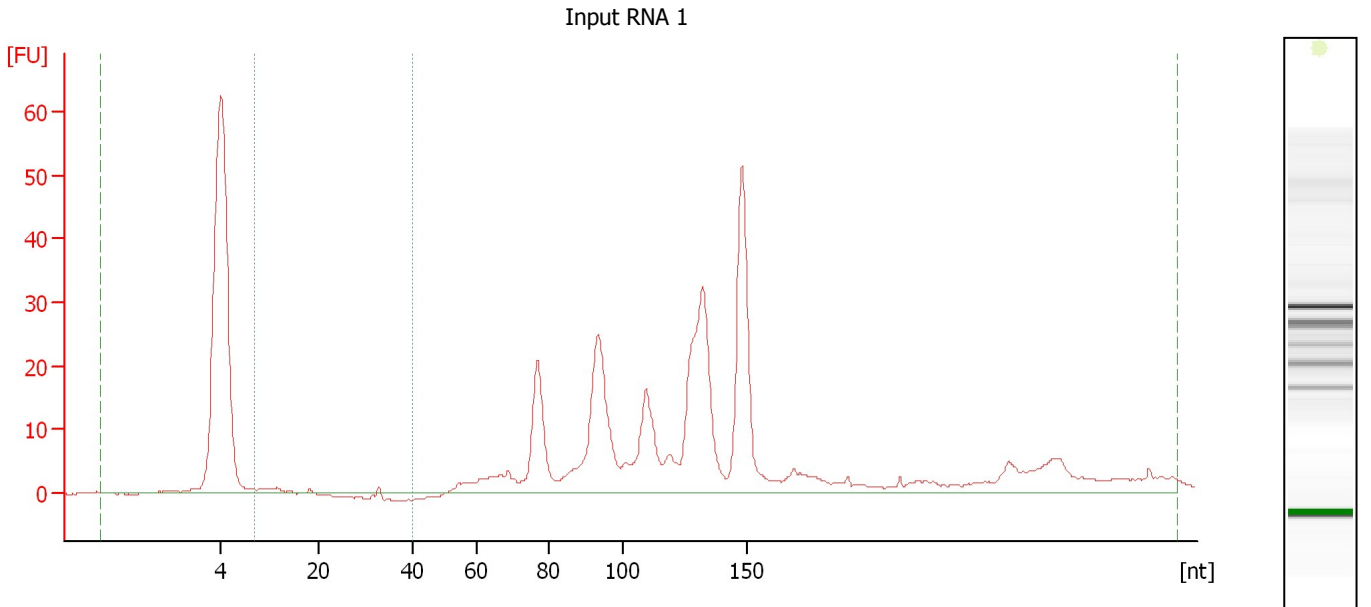
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 1 : Input RNA 1

Small RNA Concentration [pg/μl]:	1,495.2	Result Flagging Color:	
miRNA Concentration [pg/μl]:	24.3	Result Flagging Label:	2 % miRNA; Concentration: 24.30 pg/μl
miRNA / Small RNA Ratio [%]:	2		

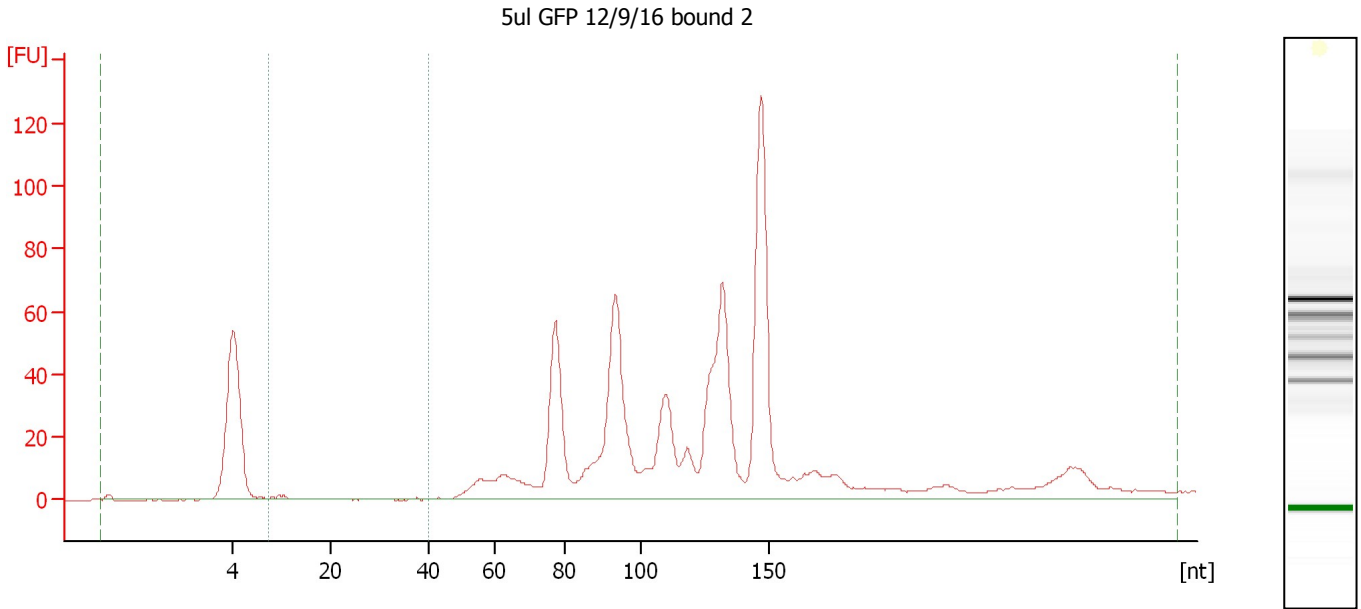
Region table for sample 1 : Input RNA 1

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	322	117	70.7	1,495.2	100	
miRNA	10	40	15	44.4	24.3	2	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 2 : 5ul GFP 12/9/16 bound 2

Small RNA Concentration [pg/μl]:	4,226.1	Result Flagging Color:	
miRNA Concentration [pg/μl]:	35.5	Result Flagging Label:	1 % miRNA; Concentration: 35.50 pg/μl
miRNA / Small RNA Ratio [%]:	1		

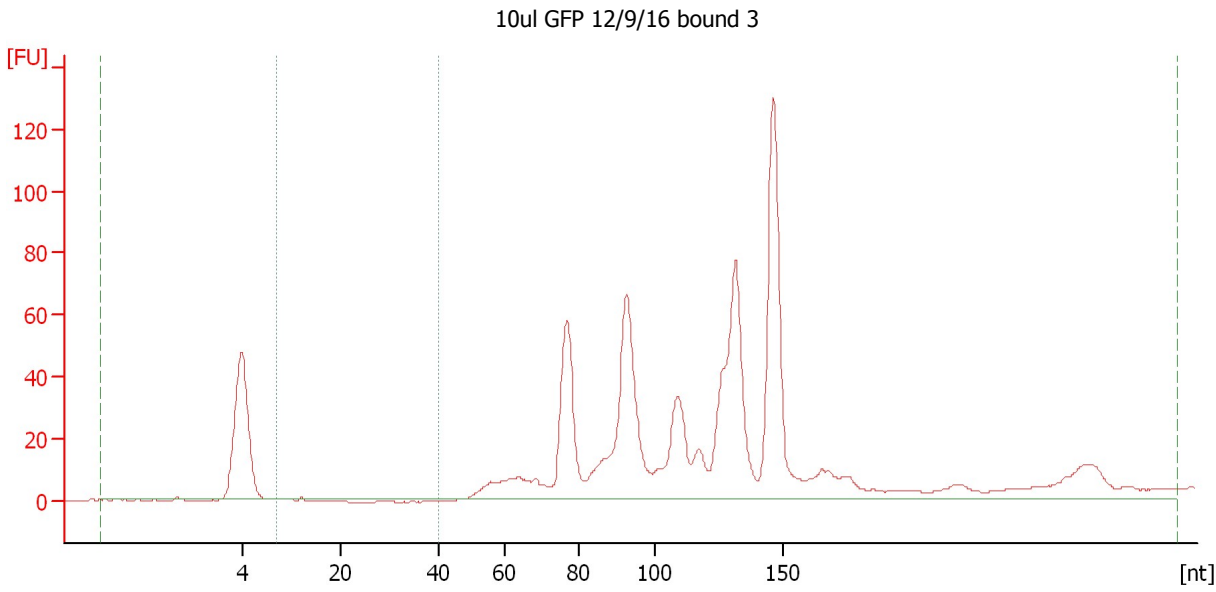
Region table for sample 2 : 5ul GFP 12/9/16 bound 2

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	311	123	53.0	4,226.1	100	
miRNA	10	40	15	39.5	35.5	1	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 3 : 10ul GFP 12/9/16 bound 3

Small RNA Concentration [pg/μl]: 4,732.5 Result Flagging Color:
 miRNA Concentration [pg/μl]: 4.4 Result Flagging Label: Number of Peaks: 23
 miRNA / Small RNA Ratio [%]: 0

Region table for sample 3 : 10ul GFP 12/9/16 bound 3

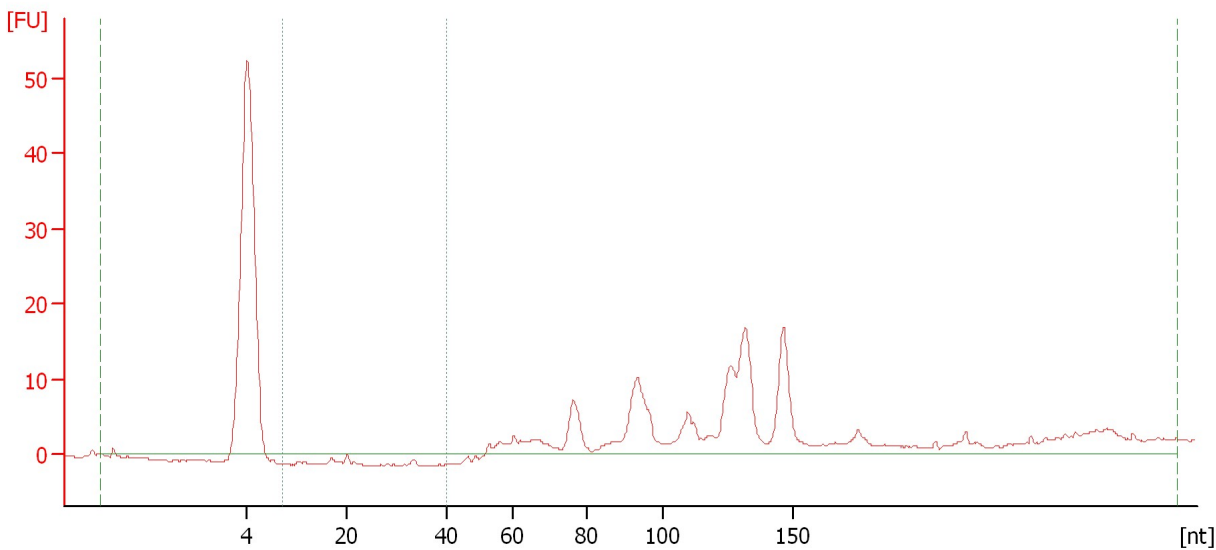
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	303	126	51.2	4,732.5	100	
miRNA	10	40	12	14.1	4.4	0	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

Created: 12/15/2016 10:47:03 AM
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Electropherogram Summary Continued ...

5ul GFP 12/9/16 unbound 6



Overall Results for sample 4 : 5ul GFP 12/9/16 unbound 6

Small RNA Concentration [pg/μl]: 853.1 Result Flagging Color:
 miRNA Concentration [pg/μl]: 0.0 Result Flagging Label: Number of Peaks: 10
 miRNA / Small RNA Ratio [%]: 0

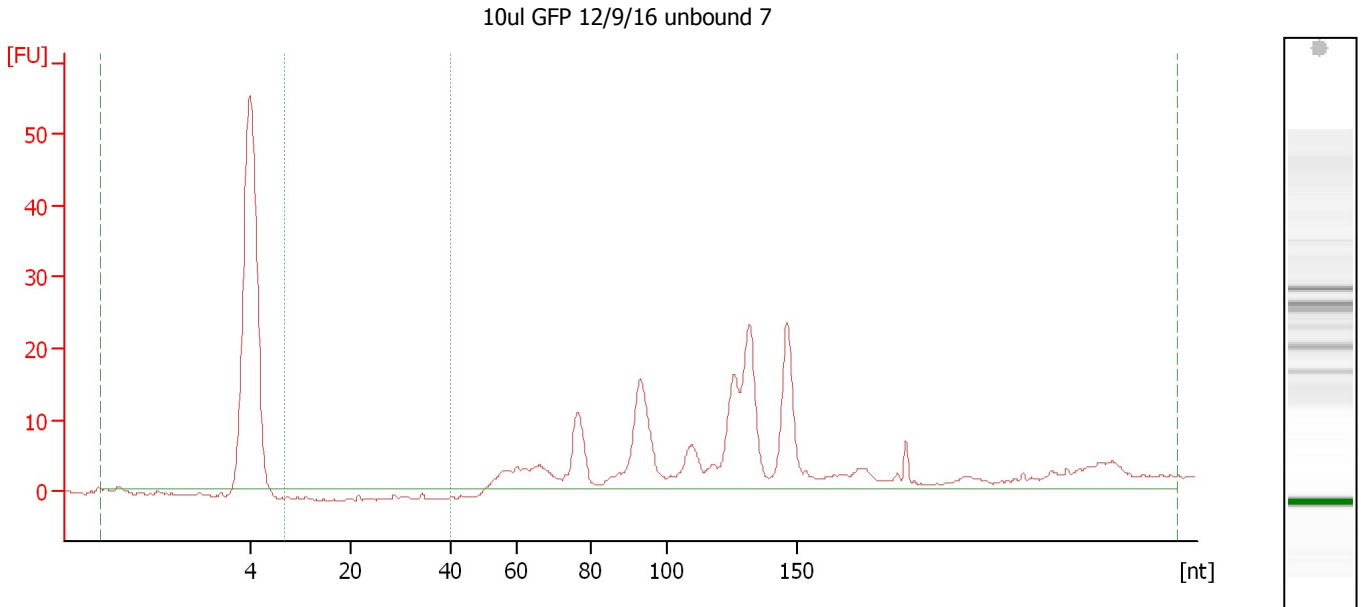
Region table for sample 4 : 5ul GFP 12/9/16 unbound 6

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	298	109	81.3	853.1	100	
miRNA	10	40	0	0.0	0.0	0	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 5 : 10ul GFP 12/9/16 unbound 7

Small RNA Concentration [pg/μl]: 1,059.1 Result Flagging Color:
 miRNA Concentration [pg/μl]: 0.0 Result Flagging Label: Number of Peaks: 15
 miRNA / Small RNA Ratio [%]: 0

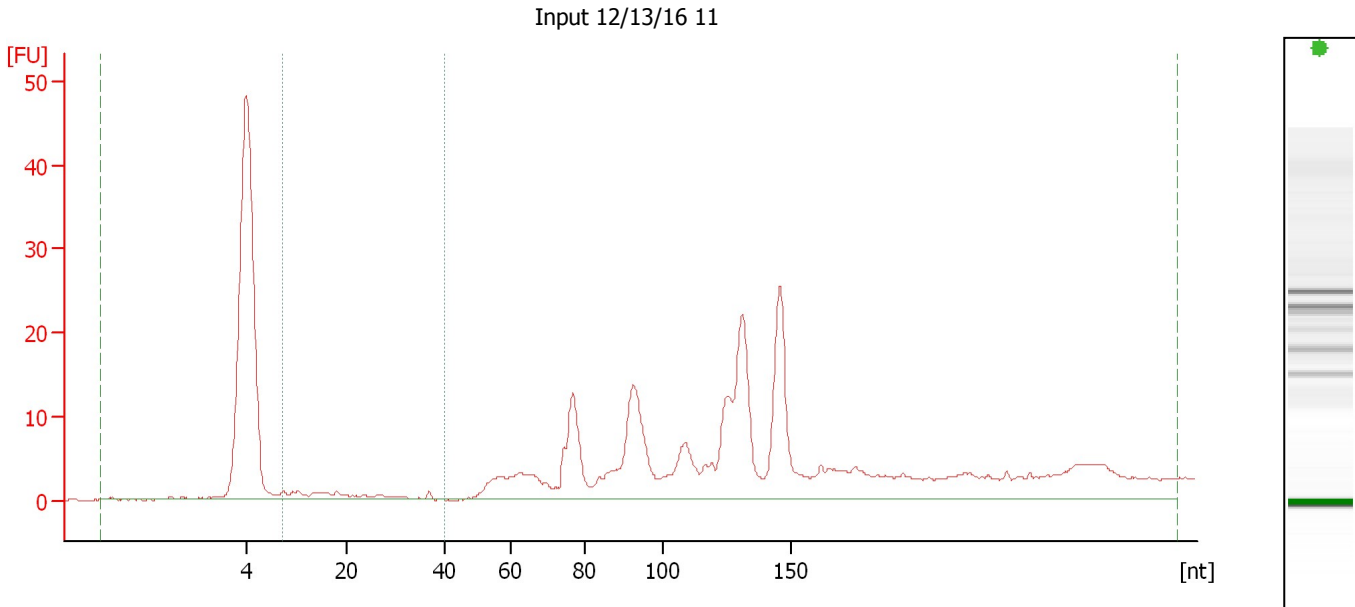
Region table for sample 5 : 10ul GFP 12/9/16 unbound 7

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	296	107	76.6	1,059.1	100	
miRNA	10	40	0	0.0	0.0	0	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 6 : Input 12/13/16 11

Small RNA Concentration [pg/μl]:	1,556.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	158.3	Result Flagging Label:	10 % miRNA; Concentration: 158.30 pg/μl
miRNA / Small RNA Ratio [%]:	10		

Region table for sample 6 : Input 12/13/16 11

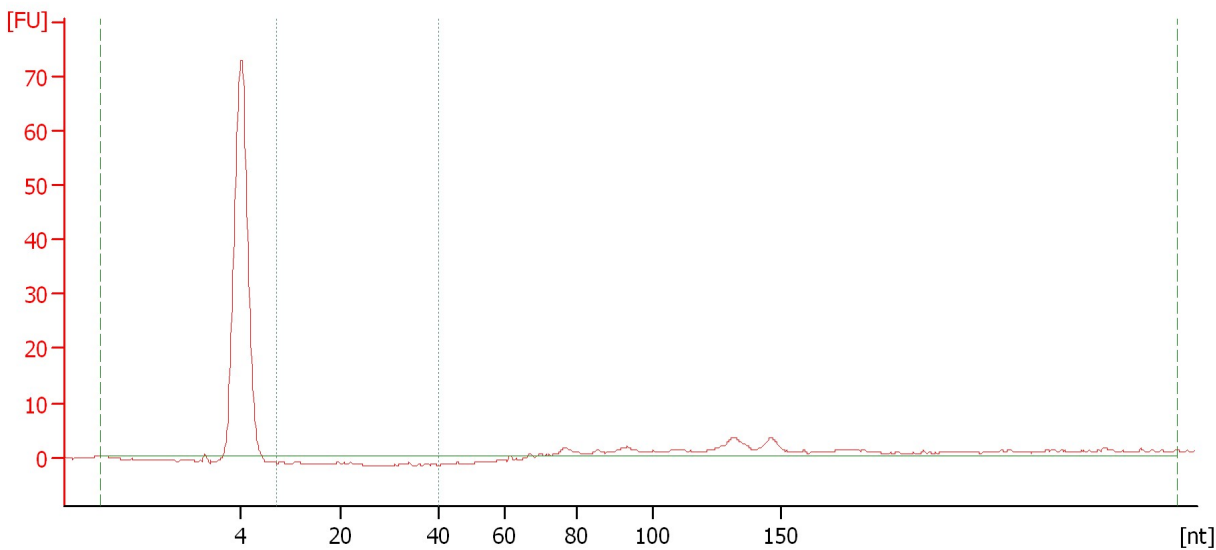
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	299	119	70.9	1,556.9	100	
miRNA	10	40	20	39.1	158.3	10	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...

5ul GFP 12/13/16 bound 12



Overall Results for sample 7 : 5ul GFP 12/13/16 bound 12

Small RNA Concentration [pg/μl]: 145.4 Result Flagging Color:
 miRNA Concentration [pg/μl]: 0.0 Result Flagging Label: Number of Peaks: 2
 miRNA / Small RNA Ratio [%]: 0

Region table for sample 7 : 5ul GFP 12/13/16 bound 12

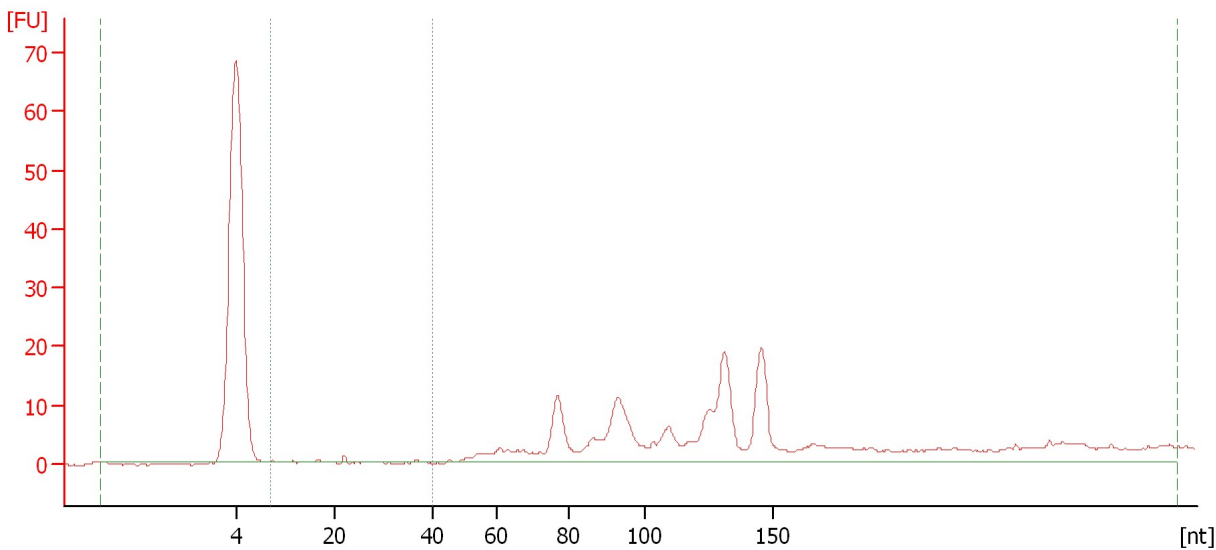
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	304	60	100.0	145.4	100	
miRNA	10	40	0	0.0	0.0	0	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...

1ul Myc 12/13/16 bound 13



Overall Results for sample 8 : 1ul Myc 12/13/16 bound 13

Small RNA Concentration [pg/μl]:	820.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	15.4	Result Flagging Label:	2 % miRNA; Concentration: 15.40 pg/μl
miRNA / Small RNA Ratio [%]:	2		

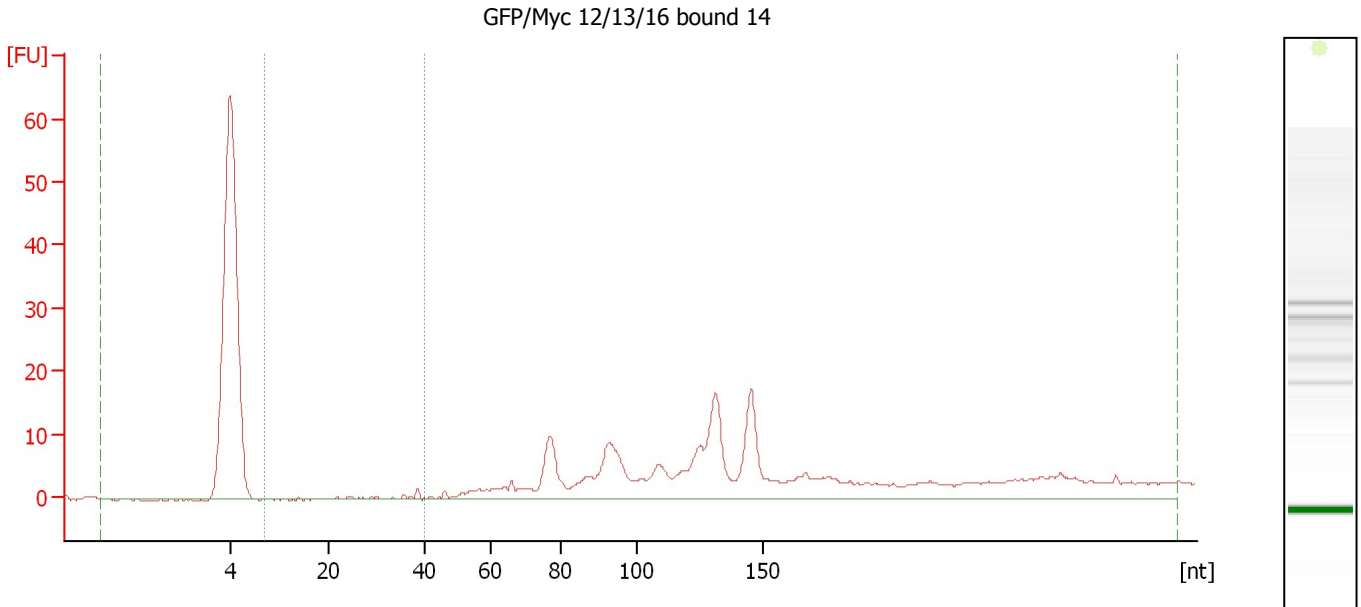
Region table for sample 8 : 1ul Myc 12/13/16 bound 13

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	308	109	83.4	820.5	100	
miRNA	10	40	22	30.2	15.4	2	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 9 : GFP/Myc 12/13/16 bound 14

Small RNA Concentration [pg/μl]:	868.1	Result Flagging Color:	
miRNA Concentration [pg/μl]:	16.0	Result Flagging Label:	2 % miRNA; Concentration: 16 pg/μl
miRNA / Small RNA Ratio [%]:	2		

Region table for sample 9 : GFP/Myc 12/13/16 bound 14

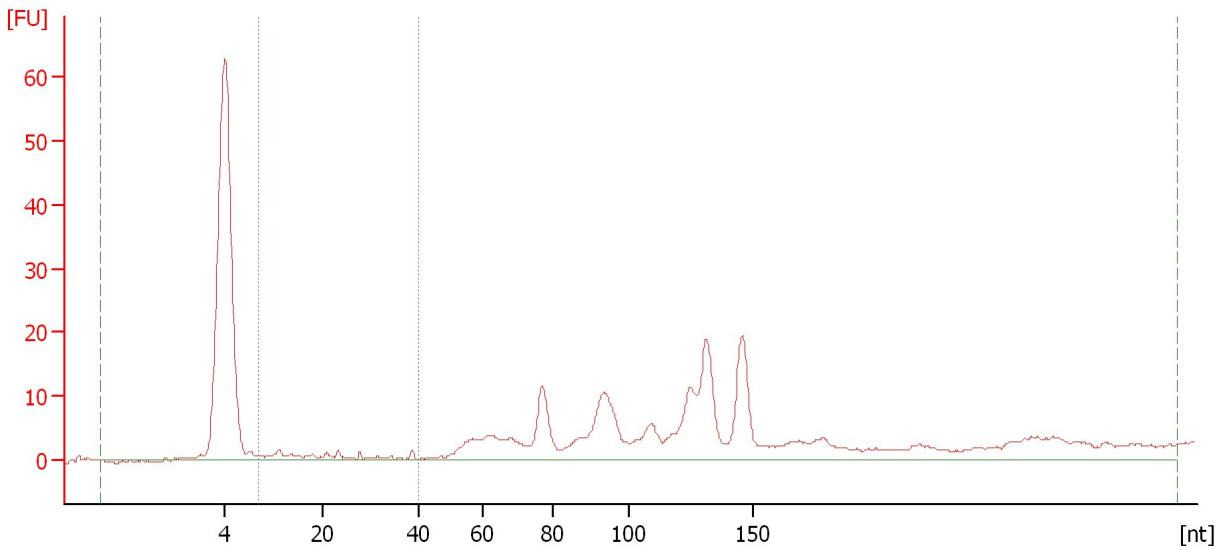
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	313	117	80.0	868.1	100	
miRNA	10	40	35	14.5	16.0	2	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

Created: 12/15/2016 10:47:03 AM
 Modified: 12/15/2016 11:19:03 AM

Electropherogram Summary Continued ...

5ul GFP 12/13/16 unbound 16



Overall Results for sample 10 : 5ul GFP 12/13/16 unbound 16

Small RNA Concentration [pg/μl]:	1,260.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	192.8	Result Flagging Label:	15 % miRNA; Concentration: 192.80 pg/μl
miRNA / Small RNA Ratio [%]:	15		

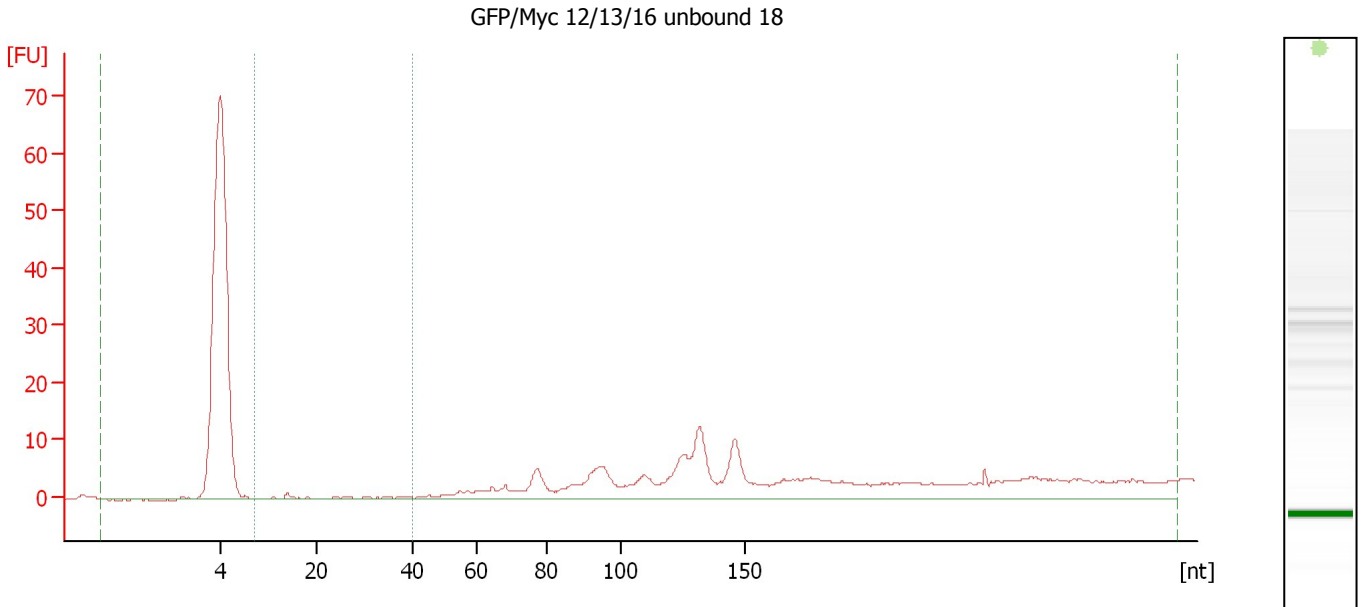
Region table for sample 10 : 5ul GFP 12/13/16 unbound 16

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	319	111	82.6	1,260.6	100	
miRNA	10	40	22	39.9	192.8	15	

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

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Electropherogram Summary Continued ...



Overall Results for sample 11 : GFP/Myc 12/13/16 unbound 18

Small RNA Concentration [pg/μl]:	676.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	26.4	Result Flagging Label:	4 % miRNA; Concentration: 26.40 pg/μl
miRNA / Small RNA Ratio [%]:	4		

Region table for sample 11 : GFP/Myc 12/13/16 unbound 18

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	323	122	84.4	676.9	100	
miRNA	10	40	26	36.3	26.4	4	

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

Created: 12/15/2016 10:47:03 AM
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Gel Image

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad

Created: 12/15/2016 10:47:03 AM
 Modified: 12/15/2016 11:19:03 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		12/15/2016 11:19:02 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-12-15\2016-12-15_001.xad)		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/15/2016 10:47:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1