11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM

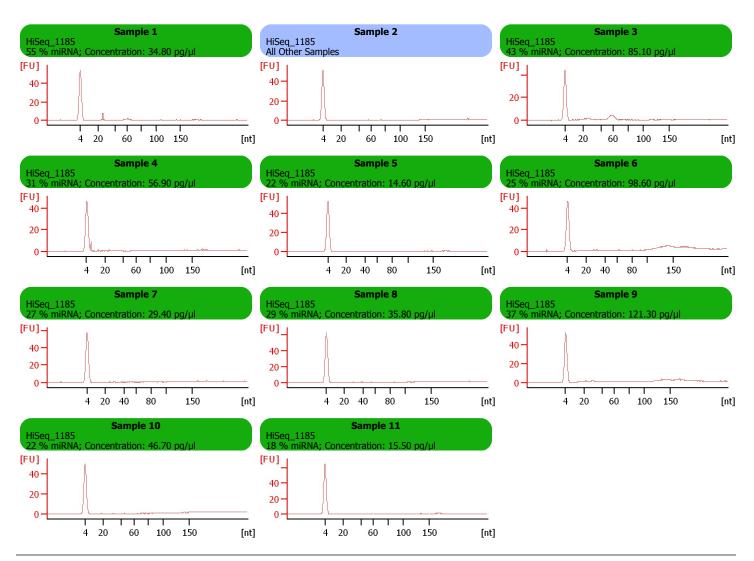
Assay Class: Small RNA Data Path: C:\... bioanalyzer\2100 expert\data\2017-11-06\2017-11-06\_001.xad

#### 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 nu	ucleotides				
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Chip Information:						
Chip Lot #:						
Reagent Kit Lot #:						
Chip Comments:						

Created:

Modified:



Sample 11	HISeq_1185	~	18 % miRNA; Concentration: 15.50 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\2017-11-06\2017-11-06\_001.xad

# Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1	HiSeq_1185	~	55 % miRNA; Concentration: 34.80 pg/μl	
Sample 2	HiSeq_1185	×	All Other Samples	
Sample 3	HiSeq_1185	~	43 % miRNA; Concentration: 85.10 pg/µl	
Sample 4	HiSeq_1185	~	31 % miRNA; Concentration: 56.90 pg/µl	
Sample 5	HiSeq_1185	*	22 % miRNA; Concentration: 14.60 pg/μl	
Sample 6	HiSeq_1185	*	25 % miRNA; Concentration: 98.60 pg/µl	
Sample 7	HiSeq_1185	*	27 % miRNA; Concentration: 29.40 pg/μl	
Sample 8	HiSeq_1185	~	29 % miRNA; Concentration: 35.80 pg/µl	
Sample 9	HiSeq_1185	~	37 % miRNA; Concentration: 121.30 pg/μl	
Sample 10	HiSeq_1185	~	22 % miRNA; Concentration: 46.70 pg/μl	
Sample 11	HiSeq_1185	*	18 % miRNA; Concentration: 15.50 pg/μl	
Ladder		~	Number of Peaks: 6	

Created: 11/6/2017 3:11:03 PM Modified: 11/6/2017 3:43:01 PM

# **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/ $\mu$ ] : 2500 Lower Marker Concentration [pg/ $\mu$ ] : 500 Upper Marker Concentration [pg/ $\mu$ ] : 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**

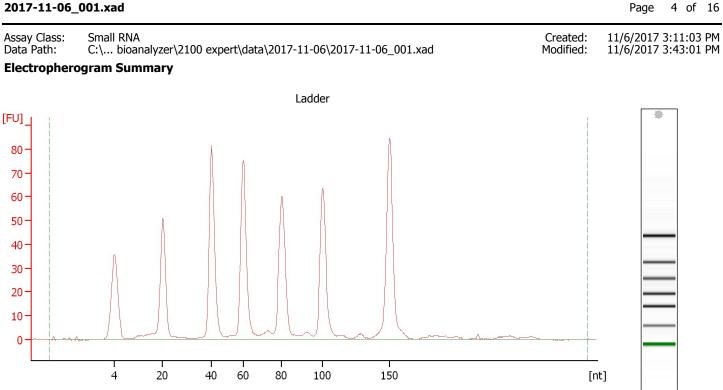
Filter Width [s] : 0.5 Polynomial Order : 4

## Ladder

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

2100 Expert (B.02.08.SI648)

Created: 11/6/2017 3:11:03 PM Modified: 11/6/2017 3:43:01 PM



### **Overall Results for Ladder**

2100 Expert (B.02.08.SI648)

Result Flagging Color:

Result Flagging Label:

Number of Peaks: 6

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2017-11-06_	001.xad		Page 5 of 16
Assay Class: Data Path:	Small RNA C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
Electrophero	gram Summary Continued		
	Sample 1 [HiSeq_1185]		
[FU]			•
50 -			
40 -			
30 -			
20-			
10-			
0		^	
	4 20 40 60 80 100 150	[nt	t]

Overall Results for sample 1 :	Sample 1		
Small RNA Concentration [pg/µl]:	63.0	Result Flagging Color:	
miRNA Concentration [pg/µl]:	34.8	Result Flagging Label:	55 % miRNA;
miRNA / Small RNA Ratio [%]:	55		Concentration: 34.80 pg/µl

Region ta	ble for sa	mple 1 :	Sample 1				
Name	From [nt]	To [nt]	Average Size	Size distribution in CV	Conc.	% of Total	Col
			[nt]	[%]	[pg/µl]		or
Small RNA	0	280	21	100.0	63.0	100	
miRNA	10	40	26	22.1	34.8	55	

<b>-</b>							
	4	20	40	60	80	100	150
Overall Results f	or sample	e1:	Sample	<u>e 1</u>			
Small RNA Concen	tration [pg/µ	ıl]: (	63.0		I	Result Flag	ging Color:
miRNA Concentration [pg/µl]:		;	34.8		I	Result Flage	ging Label:
miRNA / Small RNA	Ratio [%]:	Į	55				

2017-11-0	6_001.xad					Page 6 of 16
Assay Class: Data Path:	Small RNA C:\ bioan	alyzer\2100 expert\	data\2017-11-06\2017-11-	06_001.xad	Created Modified	1: 11/6/2017 3:11:03 PM 1: 11/6/2017 3:43:01 PM
Electrophe	erogram Sumi	mary Continued				
			Sample 2 [ HiSeq_1185 ]	]		
[FU] 50 -	٨					•
40 -						
30 -						
20-						
10-						
0	ware hard h			·		
	4	20 40	60 80 100	150		
Overall Res	ults for sampl	e 2 : <u>Sample</u>	2			
	oncentration [pg/		Result Flagg			
	entration [pg/µl]: Ill RNA Ratio [%]	0.0 : 0	Result Flagg	ng Label:	All Other Samples	
	ui maio [70]	. 0				
-	le for sample 2					
Name F	rom [nt] To [r	nt] Average Size [nt]	Size distribution in CV [%]	/ Conc. [pg/µl]	% of Total Col or	
Small RNA ( miRNA 1	) 268 .0 40	46 0	100.0 0.0	25.1 0.0	100 <b>—</b> 0 <b>—</b>	

2017-11-06_	001.xad		Page 7 of 16
Assay Class: Data Path:	Small RNA C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad gram Summary Continued	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
Electrophero	gram Summary Continued		
	Sample 3 [HiSeq_1185]		
[FU] 45 -	4		*
40-			
35 -			
30 -			
25-			
20-			
15-			
10-			
5-			
0		<u> </u>	
Li	4 20 40 60 80 100 150	[nt	:]

Overall Results for sample 3 :	Sample 3		
Small RNA Concentration [pg/µl]:	199.2	Result Flagging Color:	
miRNA Concentration [pg/µl]:	85.1	Result Flagging Label:	43 % miRNA;
miRNA / Small RNA Ratio [%]:	43		Concentration: 85.10 pg/µl

Region ta	ble for san	nple 3 :	Sample 3				
Name	From [nt]	To [nt]	Average Size	Size distribution in CV	Conc.	% of Total	Col
			[nt]	[%]	[pg/µl]		or
Small RNA	0	260	56	100.0	199.2	100	
miRNA	10	40	25	28.9	85.1	43	

2017-11-06_	001.xad		Page 8 of 16
Assay Class: Small RNA Data Path: C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad Electropherogram Summary Continued			11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
	Sample 4 [HiSeq_1185]		
[FU]-	λ		•
40-			
30 -			
20-			
10-			
0	a		
	4 20 40 60 80 100 150	[nt	:]

Overall Results for sample 4 :	Sample 4		
Small RNA Concentration [pg/µl]:	186.3	Result Flagging Color:	
miRNA Concentration [pg/µl]:	56.9	Result Flagging Label:	31 % miRNA;
miRNA / Small RNA Ratio [%]:	31		Concentration: 56.90 pg/µl

Region ta	ble for sa	nple 4 :	Sample 4				
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/µl]	% of Total	Col or
Small RNA miRNA	0 10	252 40	58 25	100.0 34.3	186.3 56.9	100 31	

2017-11-06_	001.xad		Page 9 of 16
Assay Class: Data Path:	Small RNA C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
Electrophero	gram Summary Continued		
	Sample 5 [ HiSeq_1185 ]		
[FU]			•
50 -			
40 -			
30 -			
20-			
10-			
0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	4 20 40 60 80 100 150	[n	t]

Overall Results for sample 5 :	Sample 5		
Small RNA Concentration [pg/µl]:	67.7	Result Flagging Color:	
miRNA Concentration [pg/µl]:	14.6	Result Flagging Label:	22 % miRNA;
miRNA / Small RNA Ratio [%]:	22		Concentration: 14.60 pg/µl

Region ta	ble for sau	nple 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	248	40	100.0	67.7	100	
miRNA	10	40	18	41.1	14.6	22	

2017-11-06_	001.xad		Page 10 of 16
Assay Class: Data Path: Electrophero	Small RNA C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad gram Summary Continued	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
	Sample 6 [HiSeq_1185]		
[FU]-			
40-			
30 -			
20-			
10-			
0	A		
	4 20 40 60 80 100 150	[nt	t]

Overall Results for sample 6 :	Sample 6		
Small RNA Concentration [pg/µl]:	388.9	Result Flagging Color:	
miRNA Concentration [pg/µl]:	98.6	Result Flagging Label:	25 % miRNA;
miRNA / Small RNA Ratio [%]:	25		Concentration: 98.60 pg/µl

Region ta	ble for sa	mple 6 :	Sample 6				
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV	Conc. [pg/µl]	% of Total	Col or
Small RNA	0	249	100	81.0	388.9	100	
miRNA	10	40	25	33.4	98.6	25	

2017-11-06_	001.xad		Page 11 of 16
Assay Class: Data Path:	Data Path: C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad		11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
Electrophero	gram Summary Continued		
	Sample 7 [HiSeq_1185]		
<sup>[FU]</sup>			*
50 -			
40 -			
30 -			
20-			
10-			
0			
	4 20 40 60 80 100 150	[nt	t]

Overall Results for sample 7 :	Sample 7		
Small RNA Concentration [pg/µl]:	110.5	Result Flagging Color:	
miRNA Concentration [pg/µl]:	29.4	Result Flagging Label:	27 % miRNA;
miRNA / Small RNA Ratio [%]:	27		Concentration: 29.40 pg/µl

Region ta	ble for sar	nple 7:	Sample 7				
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/µl]	% of Total	Co or
Small RNA	0	251	64	100.0	110.5	100	
miRNA	10	40	26	31.9	29.4	27	

Col or

Assay Class: Data Path:	Small RNA C:\ bioanalyzer\210	0 expert\data\2017-11-06\2017-11-06_001.xad	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
Electropher	ogram Summary Cor	ntinued		
		Sample 8 [ HiSeq_1185 ]		
(FU) 60 - 50 - 40 - 30 -				•
20-				
10-				
0				
	4 20	) 40 60 80 100 150	ſr	it]

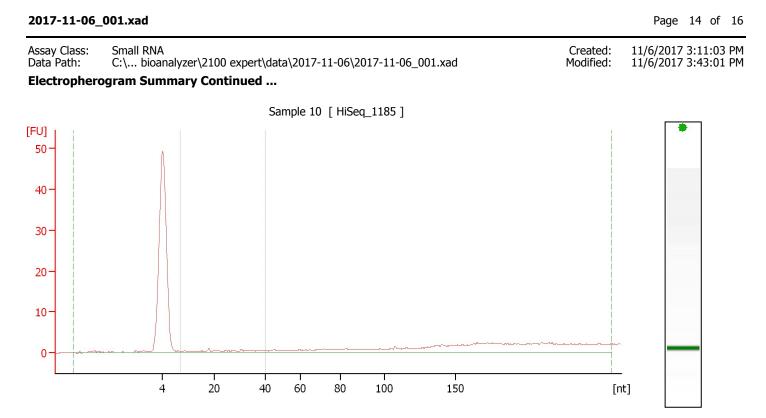
Overall Results for sample 8 :	Sample 8		
Small RNA Concentration [pg/µl]:	121.6	Result Flagging Color:	
miRNA Concentration [pg/µl]:	35.8	Result Flagging Label:	29 % miRNA;
miRNA / Small RNA Ratio [%]:	29		Concentration: 35.80 pg/µl

Region ta	ble for sa	mple 8 :	Sample 8			
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/µl]	% of Total Col or
Small RNA	0	254	64	100.0	121.6	100
miRNA	10	40	27	31.1	35.8	29

2017-11-06_	001.xad		Page 13 of 16
Assay Class: Data Path:	Small RNA C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM
Electrophero	gram Summary Continued		
	Sample 9 [HiSeq_1185]		
[FU]		1	•
50 -	A		
40 -			
30 -			
20 -			
10-			
0			
	4 20 40 60 80 100 150	[nt	]

Overall Results for sample 9 :	Sample 9		
Small RNA Concentration [pg/µl]:	326.1	Result Flagging Color:	
miRNA Concentration [pg/µl]:	121.3	Result Flagging Label:	37 % miRNA;
miRNA / Small RNA Ratio [%]:	37		Concentration: 121.30 pg/µl

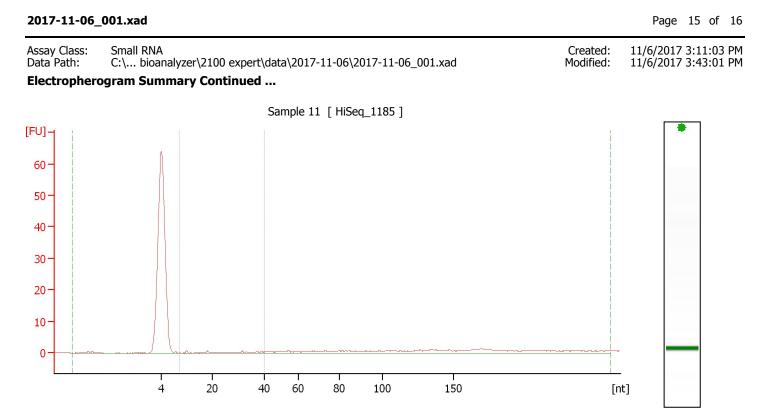
Region ta	ble for sa	mple 9 :	Sample 9				
Name	From [nt]	To [nt]	Average Size	Size distribution in CV	Conc.	% of Tota	l Col
			[nt]	[%]	[pg/µl]		or
Small RNA	0	257	84	97.6	326.1	100	
miRNA	10	40	26	31.5	121.3	37	



Overall Results for sample 10 :	Sample 10
---------------------------------	-----------

Small RNA Concentration [pg/µl]:	216.7	Result Flagging Color:	
miRNA Concentration [pg/µl]:	46.7	Result Flagging Label:	22 % miRNA;
miRNA / Small RNA Ratio [%]:	22		Concentration: 46.70 pg/µl

Region ta	ble for sar	nple 10	: <u>Sample 1</u>	<u>0</u>			
Name	From [nt]	To [nt]	Average Size	Size distribution in CV	Conc.	% of Total	Col
			[nt]	[%]	[pg/µl]		or
Small RNA	0	259	90	100.0	216.7	100	
miRNA	10	40	25	35.4	46.7	22	



<b>Overall Results for sample 11</b>	:	Sample 11
--------------------------------------	---	-----------

Small RNA Concentration [pg/µl]:	85.2	Result Flagging Color:
miRNA Concentration [pg/µl]:	15.5	Result Flagging Label: 18 % miRNA;
miRNA / Small RNA Ratio [%]:	18	Concentration: 15.50 pg/µl

Region table for sample 11 : <u>Sam</u>
---

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/µl]	% of Tota	l Col or
Small RNA	0	260	50	100.0	85.2	100	
miRNA	10	40	26	34.5	15.5	18	

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Assay Class: Data Path: <b>Gel Image</b>	Small RNA C:\ bioanalyzer\2100 expert\data\2017-11-06\2017-11-06_001.xad	Created: Modified:	11/6/2017 3:11:03 PM 11/6/2017 3:43:01 PM