11/14/2012 2:06:04 PM

11/14/2012 2:32:17 PM

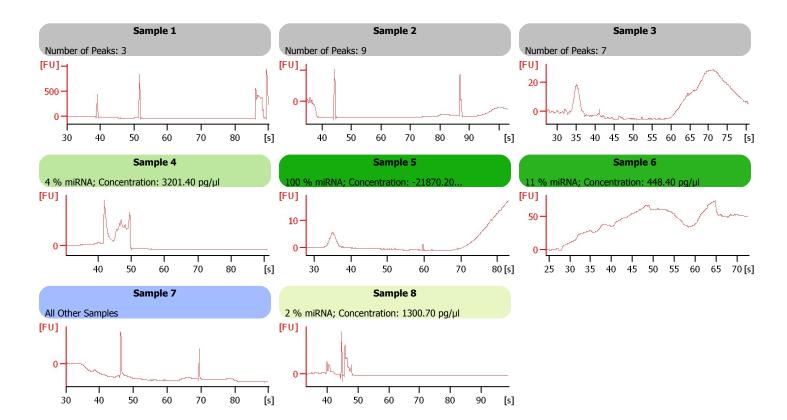
Assay Class: Small RNA Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_005.xad

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							
	© Copyright 2007 - 2009 Agil	ent Technol	ogies, Inc.						
Chip Information:									
Chip Lot #:	pk078k40								
Reagent Kit Lot #:									
Chip Comments:	1-4 no digestion, 5-8 with digestion								

Created:

Modified:



Assay Class: Data Path:	Small RNA C:\ents and S	Settings\Bioanalyzer\20)12-11-14\	2012-11-14_005.xad		Created: Modified:	11/14/2012 2:06:04 PN 11/14/2012 2:32:17 PN
Electrophore		ummary (Chip Sum					
Sample Name		Sample Comment	Status	Result Label	Result Color		
Sample 1			×	Number of Peaks: 3			
Sample 2			×	Number of Peaks: 9			
Sample 3			×	Number of Peaks: 7			
Sample 4			~	4 % miRNA;			
				Concentration: 3201.40			
				pg/µl			
Sample 5			×	100 % miRNA;			
				Concentration:			
				-21870.20 pg/µl			
Sample 6			×	11 % miRNA;			
				Concentration: 448.40			
				pg/µl			
Sample 7			×	All Other Samples			
Sample 8			\checkmark	2 % miRNA;			
				Concentration: 1300.70			
Commis O				pg/µl			
Sample 9							
Sample 10							
Sample 11				Number of Dealers 20			
Ladder			×	Number of Peaks: 26			
Chip Lot #				Reagent Kit Lot	#		
pk078k40							

Chip Comments :

2012-11-14_005.xad

1-4 no digestion, 5-8 with digestion

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] : 2500 Lower Marker Concentration [pg/ μ] : 500 Upper Marker Concentration [pg/ μ] : 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

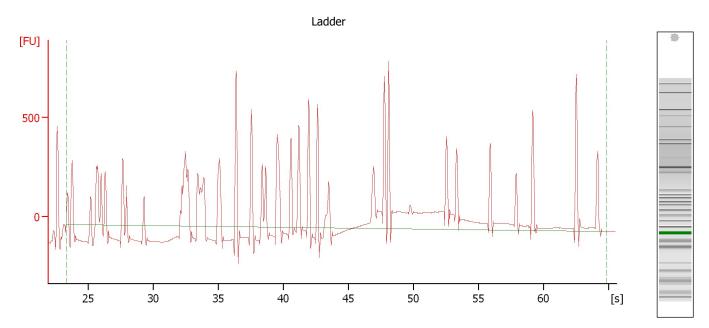
Ladder

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

Created: 11/14/2012 2:06:04 PM Modified: 11/14/2012 2:32:17 PM

Created: 11/14/2012 2:06:04 PM Modified: 11/14/2012 2:32:17 PM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

Result Flagging Label:

Number of Peaks: 26

2012-11-14_	_005.xad					Page	5 o	of 15
Assay Class: Data Path: Electrophere	Small RNA C:\ents and Sett ogram Summary		2012-11-14\2012-:	11-14_005.xad	Created: Modified:	11/14/201 11/14/201	2 2:06:0 2 2:32:1)4 pm 17 pm
			Sample 1					
[FU]_ 500 -					4			
0	I	/ 		 		т [s]		

Overall Results for sample 1 : Sample 1

Result Flagging Color:

Result Flagging Label: Number of Peaks: 3

Assay Class: Data Path:	Small RNA C:\ents and Settings	\Bioanalyzer\201	2-11-14\2012-1	1-14_005 xad		Created: Modified:	11/14/2012 2:06:04 PM 11/14/2012 2:32:17 PM
	ogram Summary Con	-	2 11 1 1 2012 1	1 11_005.xdd		riounicui	11/11/2012 2.32.17 11
			Sample 2				
[FU]							*
500-							
400-							
300-							
200-							
100-							
0-{\}					h		
-100-							<
-200-							
-300-	//						
L	і і Ю 50	60	70	80	90	100	- [s]

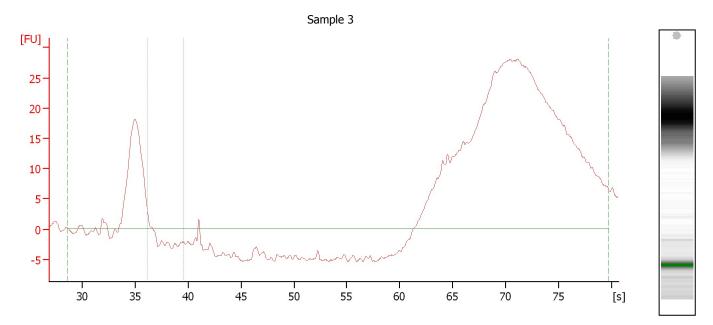
Overall Results for sample 2 :	Sample 2		
Small RNA Concentration [pg/µl]:	5.7	Result Flagging Color:	
miRNA Concentration [pg/µl]:	0.0	Result Flagging Label:	Number of Peaks: 9
miRNA / Small RNA Ratio [%]:	0		

Region ta	ble for sau	mple 2 :	Sample 2				
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/µl]	% of Tota	l Col or
Small RNA	12	530	190	80.5	5.7	100	
miRNA	12	40	0	0.0	0.0	0	

2012-11-14_005.xad

Created: 11/14/2012 2:06:04 PM Modified: 11/14/2012 2:32:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 :	Sample 3		
Small RNA Concentration [pg/µl]:	7,000.6	Result Flagging Color:	
miRNA Concentration [pg/µl]:	1.6	Result Flagging Label:	Number of Peaks: 7
miRNA / Small RNA Ratio [%]:	0		

Region ta	able for sa	mple 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	305	200	36.1	7,000.6	100	
miRNA	10	40	10	5.1	1.6	0	

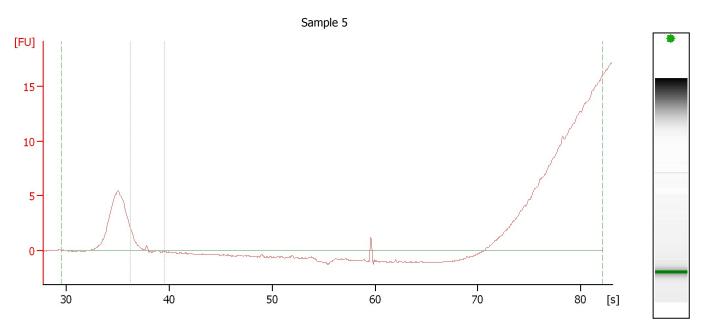
2012-11-14 __	_005.xad		Page 8 of 15
Assay Class: Data Path: Electropher	Small RNA C:\ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_005.xad rogram Summary Continued	Created: Modified:	11/14/2012 2:06:04 PM 11/14/2012 2:32:17 PM
	Sample 4		
300 -			
250 -			
200 -			
150-			
100-			
50 -			
0			
-50 -			
	40 50 60 70 80	90[[s]

Overall Results for sample 4 :	Sample 4		
Small RNA Concentration [pg/µl]:	77,771.5	Result Flagging Color:	
miRNA Concentration [pg/µl]:	3,201.4	Result Flagging Label:	4 % miRNA;
miRNA / Small RNA Ratio [%]:	4		Concentration: 3201.40 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	0	410	67	14.2	77,771.5	100	
miRNA	10	40	23	40.1	3,201.4	4	

Created: 11/14/2012 2:06:04 PM Modified: 11/14/2012 2:32:17 PM

Electropherogram Summary Continued ...

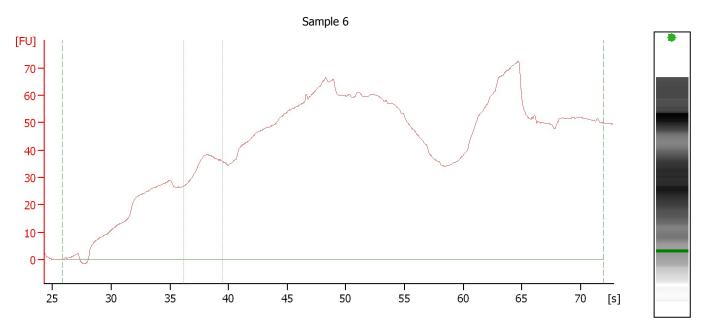


Overall Results for sample 5 :	Sample 5		
Small RNA Concentration [pg/µl]:	-21,870.2	Result Flagging Color:	
miRNA Concentration [pg/µl]: miRNA / Small RNA Ratio [%]:	-21,870.2 100	Result Flagging Label:	100 % miRNA; Concentration: -21870.20 pg/µl

Region ta	ble for sau	nple 5:	Sample 5				
Name	From [nt]	To [nt]	Average Size	Size distribution in CV	Conc.	% of Total	
			[nt]	[%]	[pg/µl]		or
Small RNA	0	329	259	37.7	-21,870.2	100	
miRNA	10	40	12	18.2	-21,870.2	100	

Created: 11/14/2012 2:06:04 PM Modified: 11/14/2012 2:32:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 :	Sample 6		
Small RNA Concentration [pg/µl]:	4,215.3	Result Flagging Color:	
miRNA Concentration [pg/µl]:	448.4	Result Flagging Label:	11 % miRNA;
miRNA / Small RNA Ratio [%]:	11		Concentration: 448.40 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 Tota	Col or
Small RNA	0	228	97	59.9	4,215.3	100	
miRNA	10	40	20	40.5	448.4	11	

Assay Class: Data Path:	Small RNA C:\ents and Sett	ings\Bioanalyzer	\2012-11-14\2012-11	-14_005.xad	Crea Modif	ted: 11/14 fied: 11/14	4/2012 2:06:04 PM 4/2012 2:32:17 PM
Electropher	ogram Summary (Continued					
			Sample 7				
[FU]-]							•
300 -							
200 -				1			
100-							
0							
-100-				~			
-200 -		_ * _ * _ * /					
30	1 40	50	60	70	80	 [s]	
Overall Resu	Ilts for sample 7 :	Sample 7					
Result Flagging	g Color:		Result Flagging La	abel: All (Other Samples		

2012-11-14_	_005.xad							Page 12 of 15
Assay Class: Data Path:				14\2012-11-14_(005.xad	Crea Modif	ted: 11/1 ied: 11/1	4/2012 2:06:04 PM 4/2012 2:32:17 PM
Electrophere	ogram Summar	y Continue	1					
			Sar	nple 8				
[FU] 400 -								*
300 -								
200-								
100-								
0		,,,,,,,						
-100-	l l							
	40	50	60	70	80	90	[s]	

Overall Results for sample 8 :	Sample 8		
Small RNA Concentration [pg/µl]:	73,662.7	Result Flagging Color:	
miRNA Concentration [pg/µl]:	1,300.7	Result Flagging Label:	2 % miRNA;
miRNA / Small RNA Ratio [%]:	2		Concentration: 1300.70 pg/µl

Region ta							
Name	From [nt]	To [nt]	Average Size	Size distribution in CV	Conc.	% of Total	Col
			[nt]	[%]	[pg/µl]	<u>a</u>	or
Small RNA	5	487	64	13.3	73,662.7	100	
miRNA	10	40	29	11.5	1,300.7	2	

2012-11-14_	Page 13 of 15		
Assay Class: Data Path:	Small RNA C:\ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_005.xad		11/14/2012 2:06:04 PM 11/14/2012 2:32:17 PM
Gel Image			

2012-11-14_	Page 14 of 15		
Assay Class:	Small RNA		11/14/2012 2:06:04 PM
Data Path:	C:\ents and Settings\Bioanalyzer\2012-11-14\2012-11-14_005.xad		11/14/2012 2:32:17 PM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: Data Path:	Small RNA C:\ents ar	nd Settings\Bioar		eated: dified:	11/14/2012 2:06:04 PM 11/14/2012 2:32:17 PM			
Run Logboo	k							
Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		11/14/2012 2:32:15 PM	(GMT08:00) Pacific Standard Time	UC Dav	ris D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioana yzer\2012-11-14_00 5.xad)	4	Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard Time		ris D8XSMGH1
Product Numbe : G2938B	r	Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard Time		ris D8XSMGH1
Name :		Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard Time		ris D8XSMGH1
Vendor : Agilen Technologies	t	Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard Time		ris D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard Time		ris D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard Time		ris D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/14/2012 2:06:10 PM	(GMT08:00) Pacific Standard	UC Dav	ris D8XSMGH1

Time