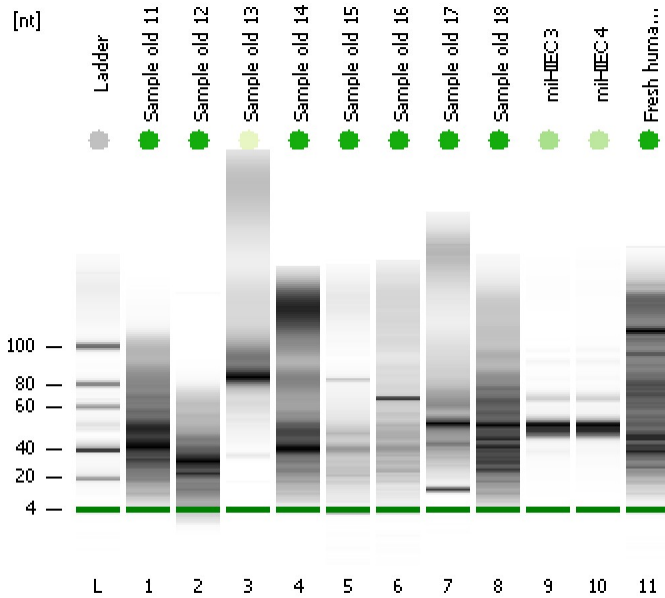


Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
Modified: 9/15/2014 2:30:59 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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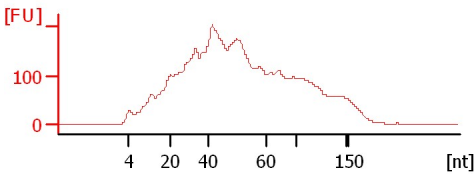
Chip Information:

Chip Lot #: sf18BK40

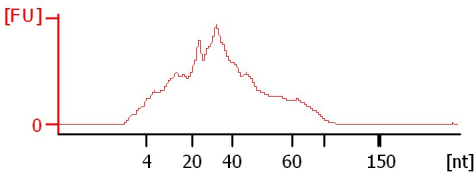
Reagent Kit Lot #:

Chip Comments:

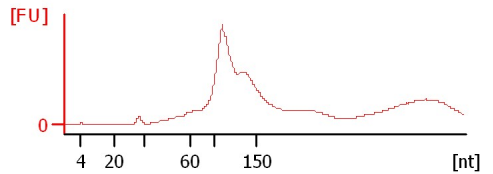
Sample old 11
42 % miRNA; Concentration: 11312.30 p...



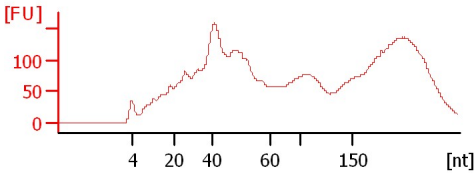
Sample old 12
67 % miRNA; Concentration: 5632.70 pg/μl



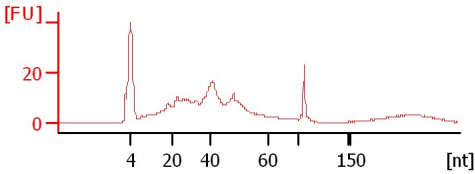
Sample old 13
2 % miRNA; Concentration: 3816.40 pg/μl



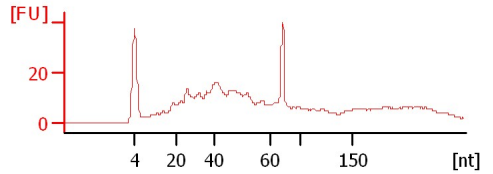
Sample old 14
42 % miRNA; Concentration: 6787.10 pg/μl



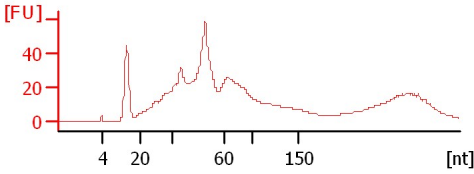
Sample old 15
57 % miRNA; Concentration: 968.10 pg/μl



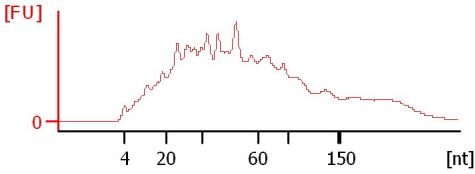
Sample old 16
43 % miRNA; Concentration: 1071.70 pg/μl



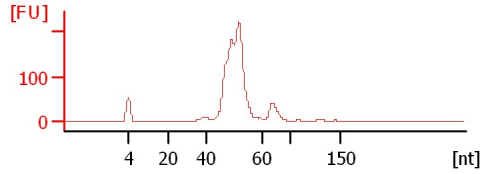
Sample old 17
33 % miRNA; Concentration: 39446.10 p...



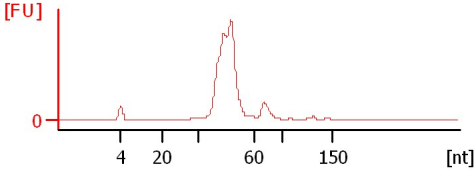
Sample old 18
44 % miRNA; Concentration: 14298.50 p...



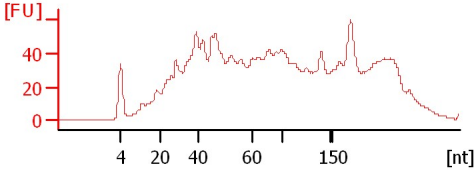
miHIEC 3
5 % miRNA; Concentration: 207.80 pg/μl



miHIEC 4
4 % miRNA; Concentration: 321.20 pg/μl















Fresh human milk-1 w/I
33 % miRNA; Concentration: 2971.40 pg/μl



Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample old 11		✓	42 % miRNA; Concentration: 11312.30 pg/μl	
Sample old 12		✓	67 % miRNA; Concentration: 5632.70 pg/μl	
Sample old 13		✓	2 % miRNA; Concentration: 3816.40 pg/μl	
Sample old 14		✓	42 % miRNA; Concentration: 6787.10 pg/μl	
Sample old 15		✓	57 % miRNA; Concentration: 968.10 pg/μl	
Sample old 16		✓	43 % miRNA; Concentration: 1071.70 pg/μl	
Sample old 17		✓	33 % miRNA; Concentration: 39446.10 pg/μl	
Sample old 18		✓	44 % miRNA; Concentration: 14298.50 pg/μl	
miHIEC 3		✓	5 % miRNA; Concentration: 207.80 pg/μl	
miHIEC 4		✓	4 % miRNA; Concentration: 321.20 pg/μl	
Fresh human milk-1 w/I		✓	33 % miRNA; Concentration: 2971.40 pg/μl	
Ladder		✓	Number of Peaks: 6	

Chip Lot #
sf18BK40

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
Modified: 9/15/2014 2:30:59 PM

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

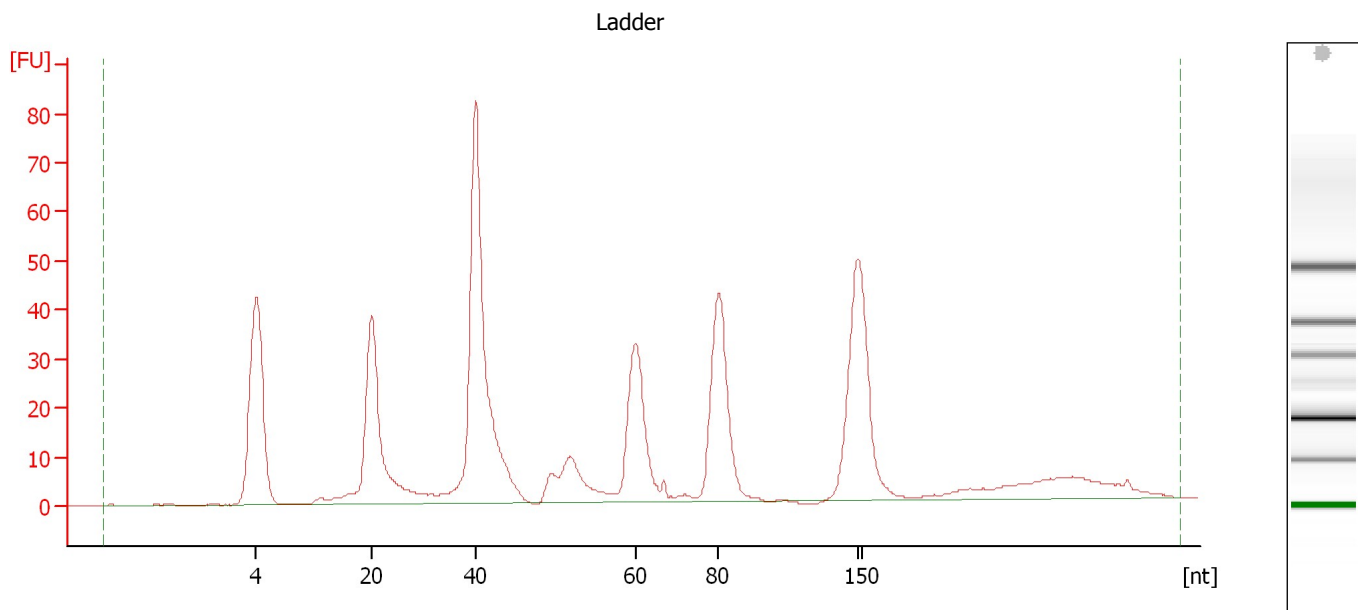
Ladder

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

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

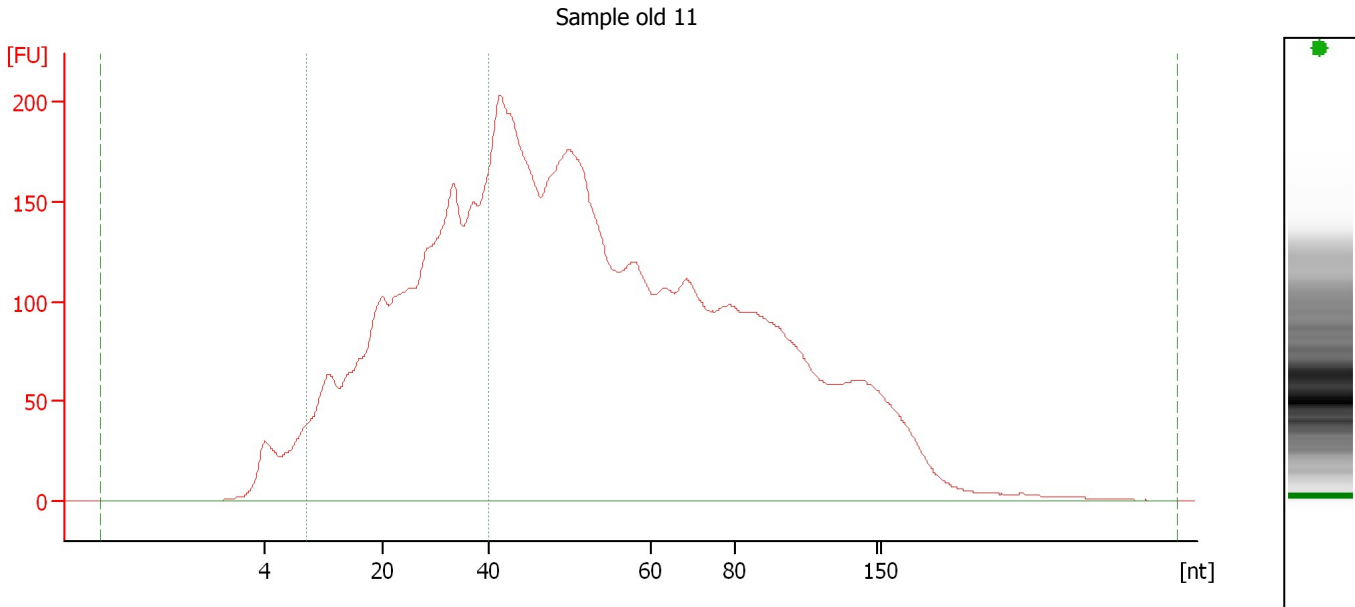
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Sample old 11

Small RNA Concentration [pg/μl]:	26,664.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	11,312.3	Result Flagging Label:	42 % miRNA; Concentration: 11312.30 pg/μl
miRNA / Small RNA Ratio [%]:	42		

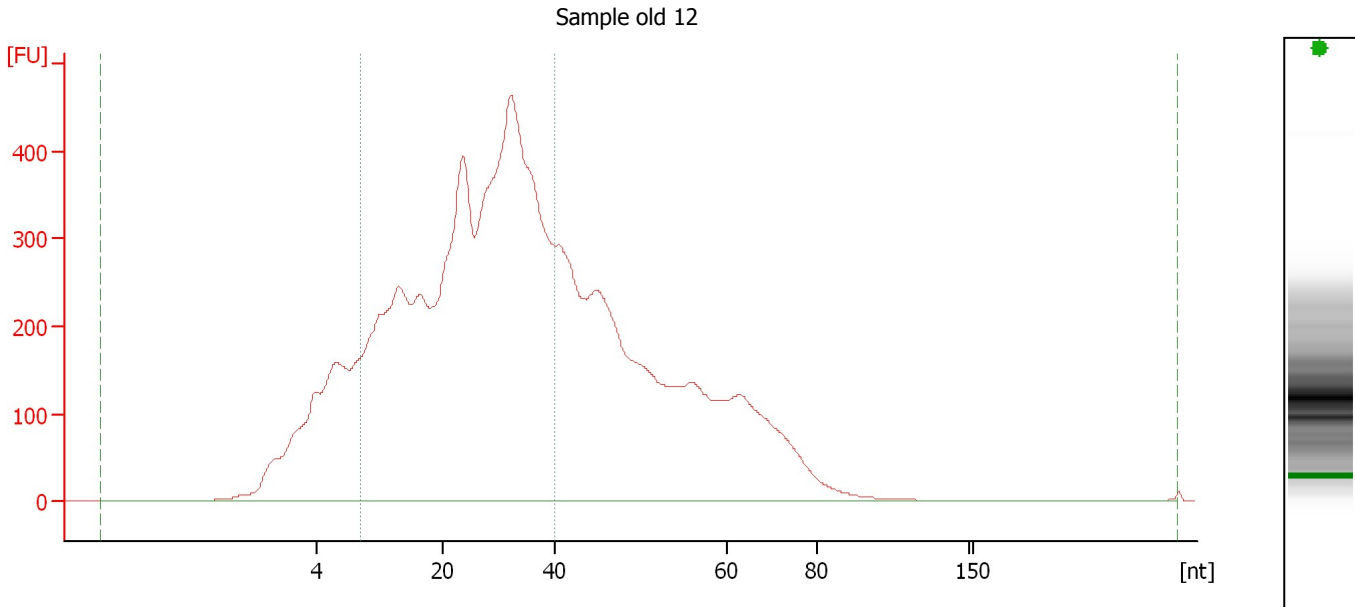
Region table for sample 1 : Sample old 11

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	5,293	89	100.0	26,664.8	100	
miRNA	10	40	27	32.1	11,312.3	42	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Sample old 12

Small RNA Concentration [pg/μl]:	8,431.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	5,632.7	Result Flagging Label:	67 % miRNA; Concentration: 5632.70 pg/μl
miRNA / Small RNA Ratio [%]:	67		

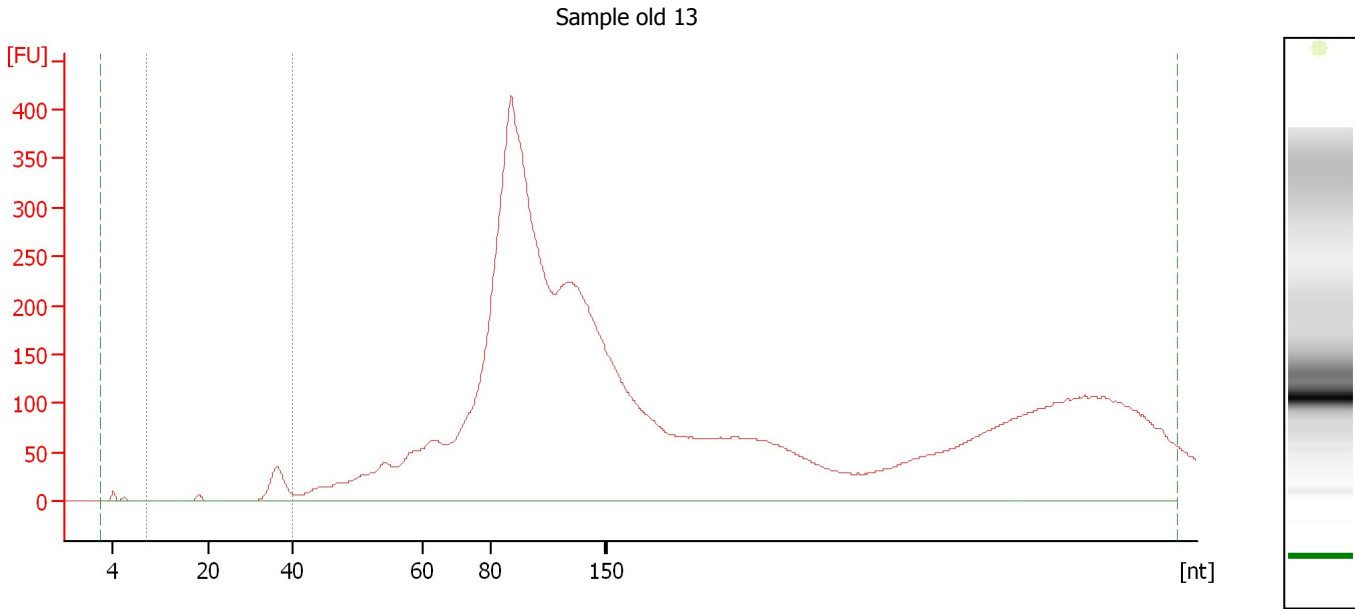
Region table for sample 2 : Sample old 12

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	3,477	34	100.0	8,431.4	100	
miRNA	10	40	25	33.5	5,632.7	67	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Sample old 13

Small RNA Concentration [pg/μl]:	159,461.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,816.4	Result Flagging Label:	2 % miRNA; Concentration: 3816.40 pg/μl
miRNA / Small RNA Ratio [%]:	2		

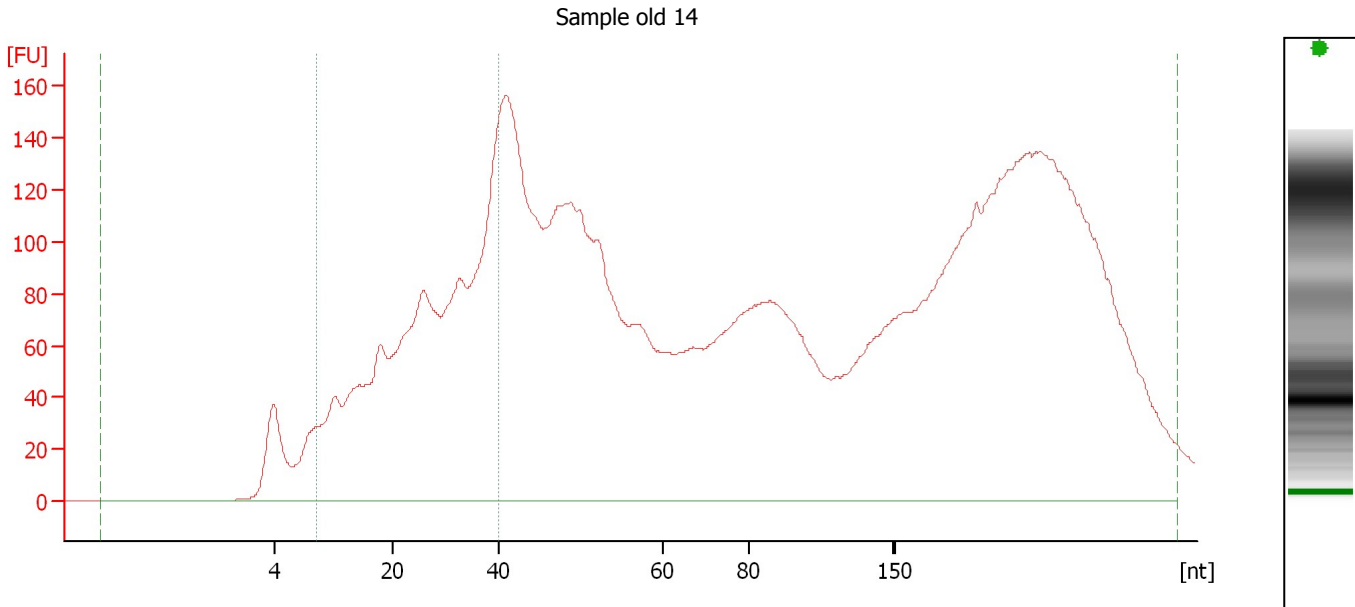
Region table for sample 3 : Sample old 13

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	2	12,490	3,317	100.0	159,461.4	100	
miRNA	10	40	35	15.1	3,816.4	2	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Sample old 14

Small RNA Concentration [pg/μl]:	16,274.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	6,787.1	Result Flagging Label:	42 % miRNA; Concentration: 6787.10 pg/μl
miRNA / Small RNA Ratio [%]:	42		

Region table for sample 4 : Sample old 14

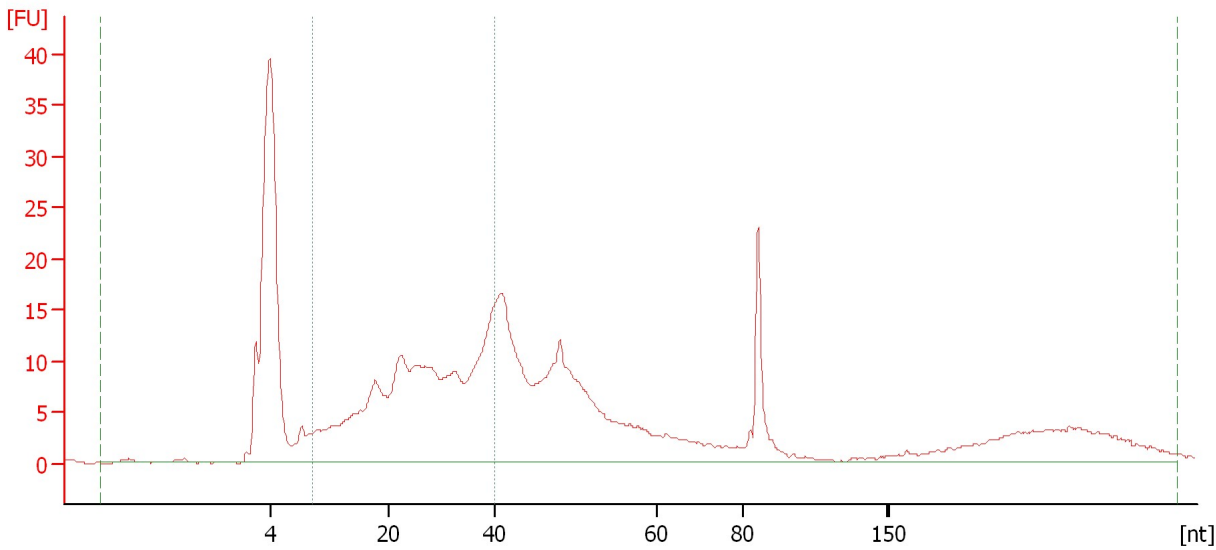
Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	4,974	913	100.0	16,274.3	100	
miRNA	10	40	27	32.9	6,787.1	42	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...

Sample old 15



Overall Results for sample 5 : Sample old 15

Small RNA Concentration [pg/μl]:	1,703.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	968.1	Result Flagging Label:	57 % miRNA; Concentration: 968.10 pg/μl
miRNA / Small RNA Ratio [%]:	57		

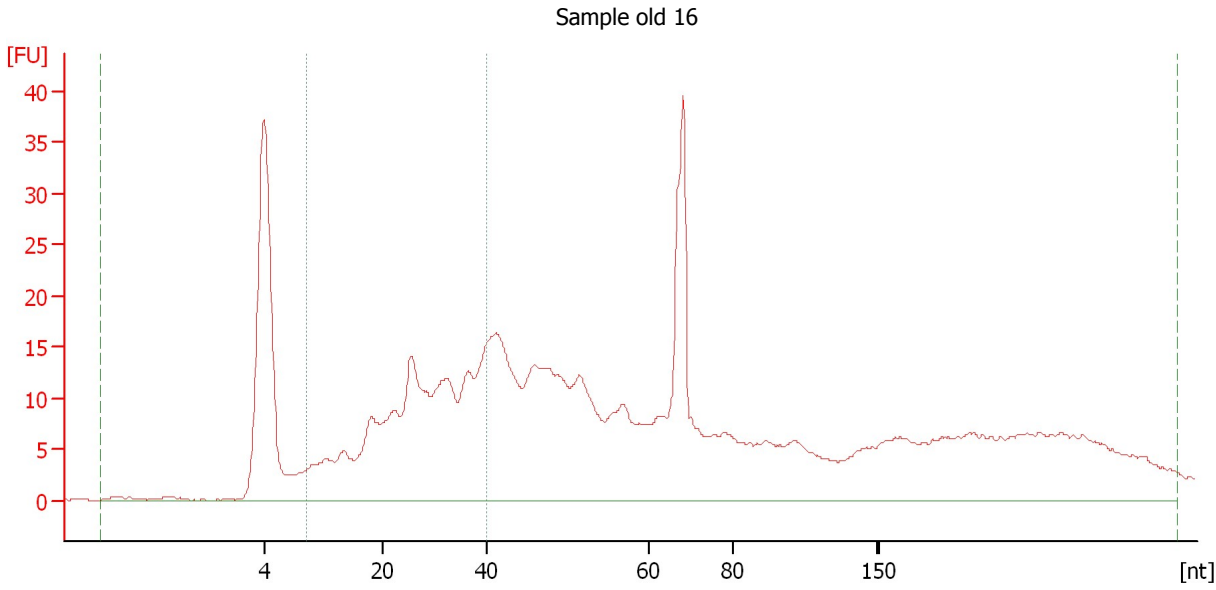
Region table for sample 5 : Sample old 15

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	5,115	421	100.0	1,703.3	100	
miRNA	10	40	26	32.1	968.1	57	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Sample old 16

Small RNA Concentration [pg/μl]:	2,496.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,071.7	Result Flagging Label:	43 % miRNA; Concentration: 1071.70 pg/μl
miRNA / Small RNA Ratio [%]:	43		

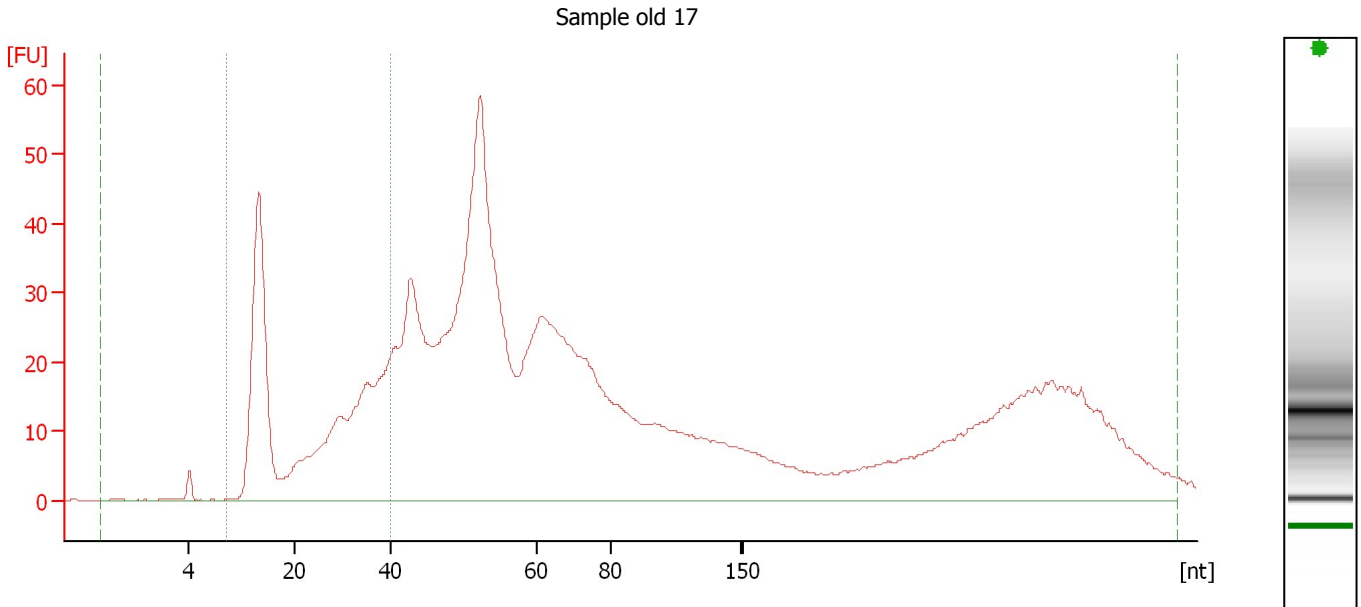
Region table for sample 6 : Sample old 16

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	5,329	622	100.0	2,496.8	100	
miRNA	10	40	27	30.7	1,071.7	43	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Sample old 17

Small RNA Concentration [pg/μl]:	118,991.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	39,446.1	Result Flagging Label:	33 % miRNA; Concentration: 39446.10 pg/μl
miRNA / Small RNA Ratio [%]:	33		

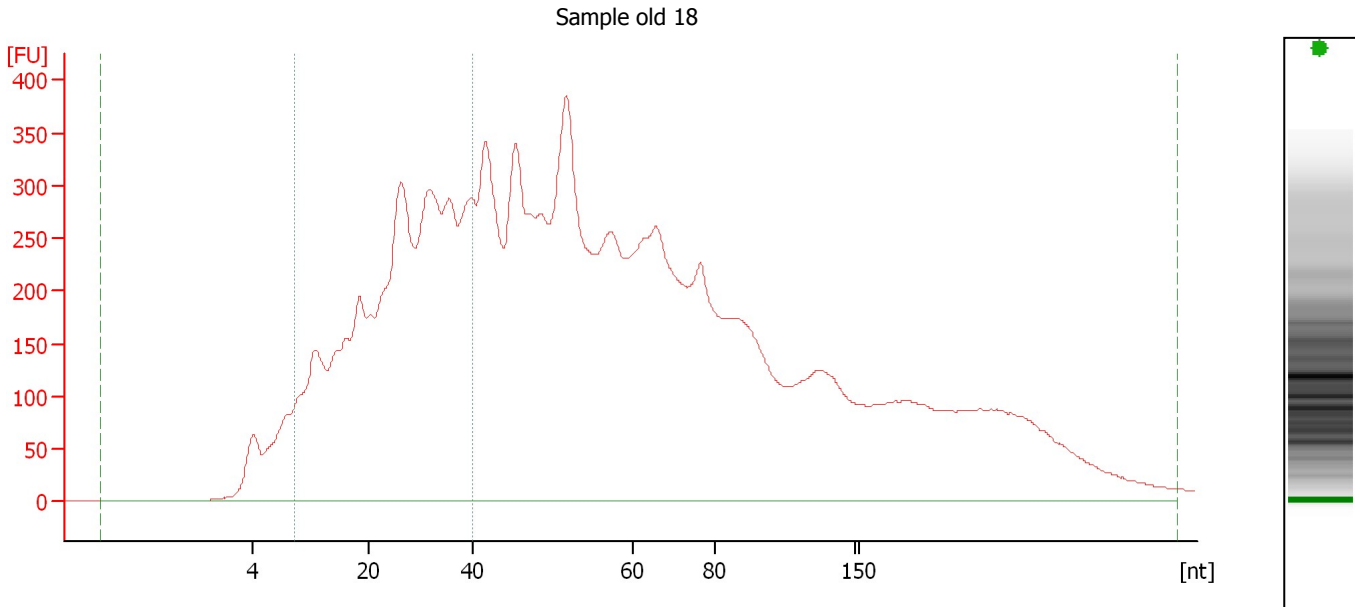
Region table for sample 7 : Sample old 17

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	8,519	1,469	100.0	118,991.8	100	
miRNA	10	40	25	37.6	39,446.1	33	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Sample old 18

Small RNA Concentration [pg/μl]:	32,353.0	Result Flagging Color:	
miRNA Concentration [pg/μl]:	14,298.5	Result Flagging Label:	44 % miRNA; Concentration: 14298.50 pg/μl
miRNA / Small RNA Ratio [%]:	44		

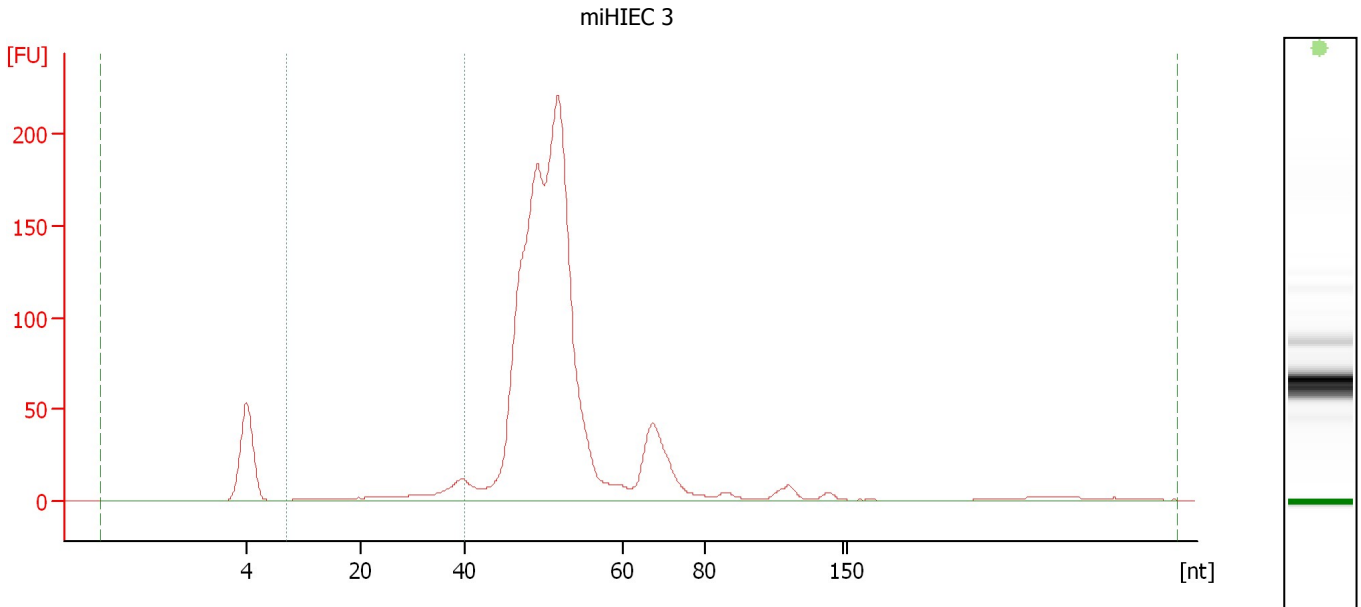
Region table for sample 8 : Sample old 18

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	5,767	361	100.0	32,353.0	100	
miRNA	10	40	26	32.5	14,298.5	44	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : miHIEC 3

Small RNA Concentration [pg/μl]:	4,419.2	Result Flagging Color:	
miRNA Concentration [pg/μl]:	207.8	Result Flagging Label:	5 % miRNA; Concentration: 207.80 pg/μl
miRNA / Small RNA Ratio [%]:	5		

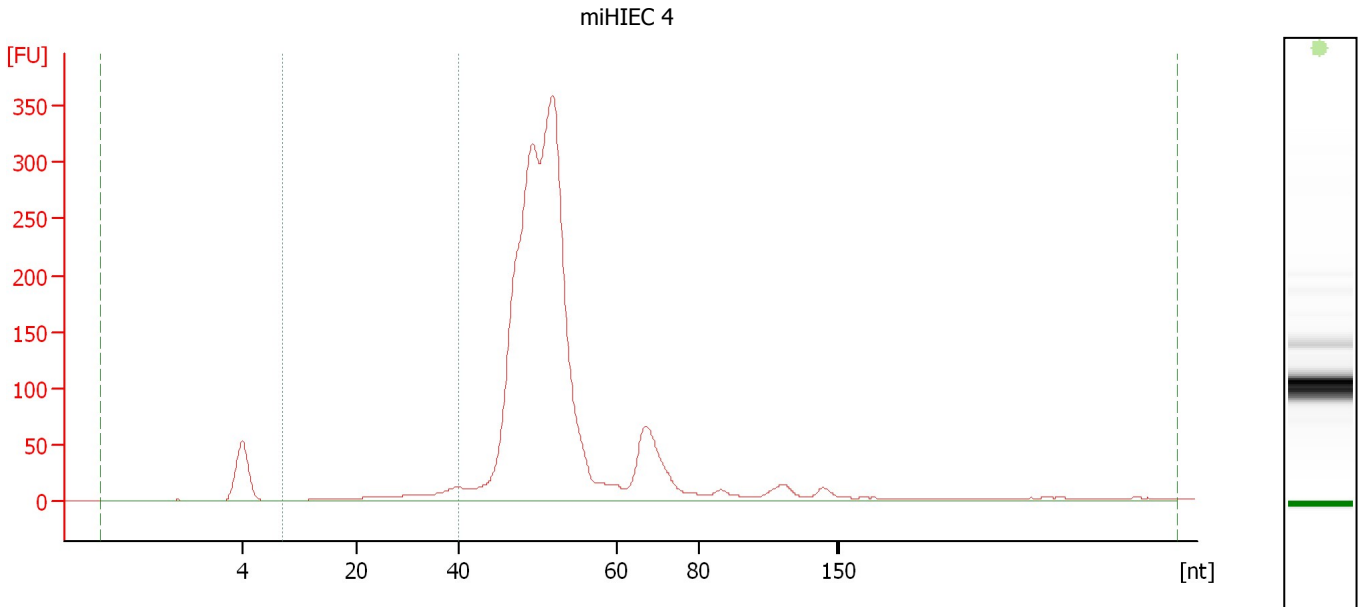
Region table for sample 9 : miHIEC 3

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	6,028	123	100.0	4,419.2	100	
miRNA	10	40	31	27.3	207.8	5	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : miHIEC 4

Small RNA Concentration [pg/μl]:	7,415.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	321.2	Result Flagging Label:	4 % miRNA; Concentration: 321.20 pg/μl
miRNA / Small RNA Ratio [%]:	4		

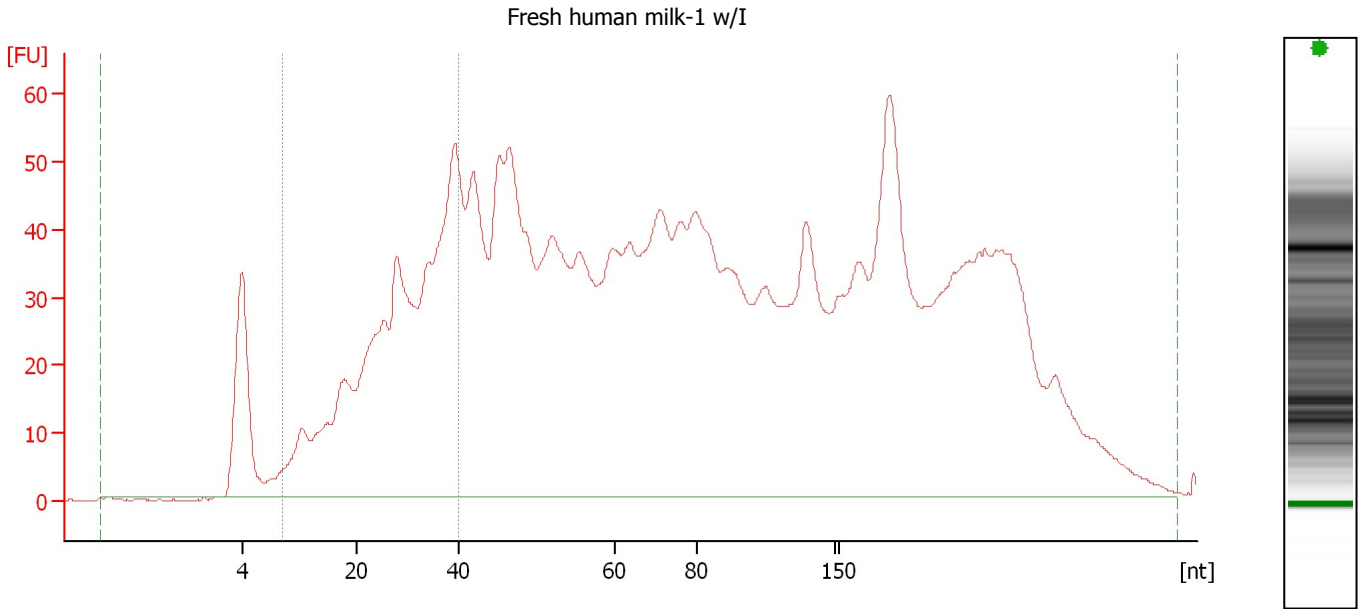
Region table for sample 10 : miHIEC 4

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	6,180	151	100.0	7,415.6	100	
miRNA	10	40	30	27.5	321.2	4	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Fresh human milk-1 w/I

Small RNA Concentration [pg/μl]:	8,959.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,971.4	Result Flagging Label:	33 % miRNA; Concentration: 2971.40 pg/μl
miRNA / Small RNA Ratio [%]:	33		

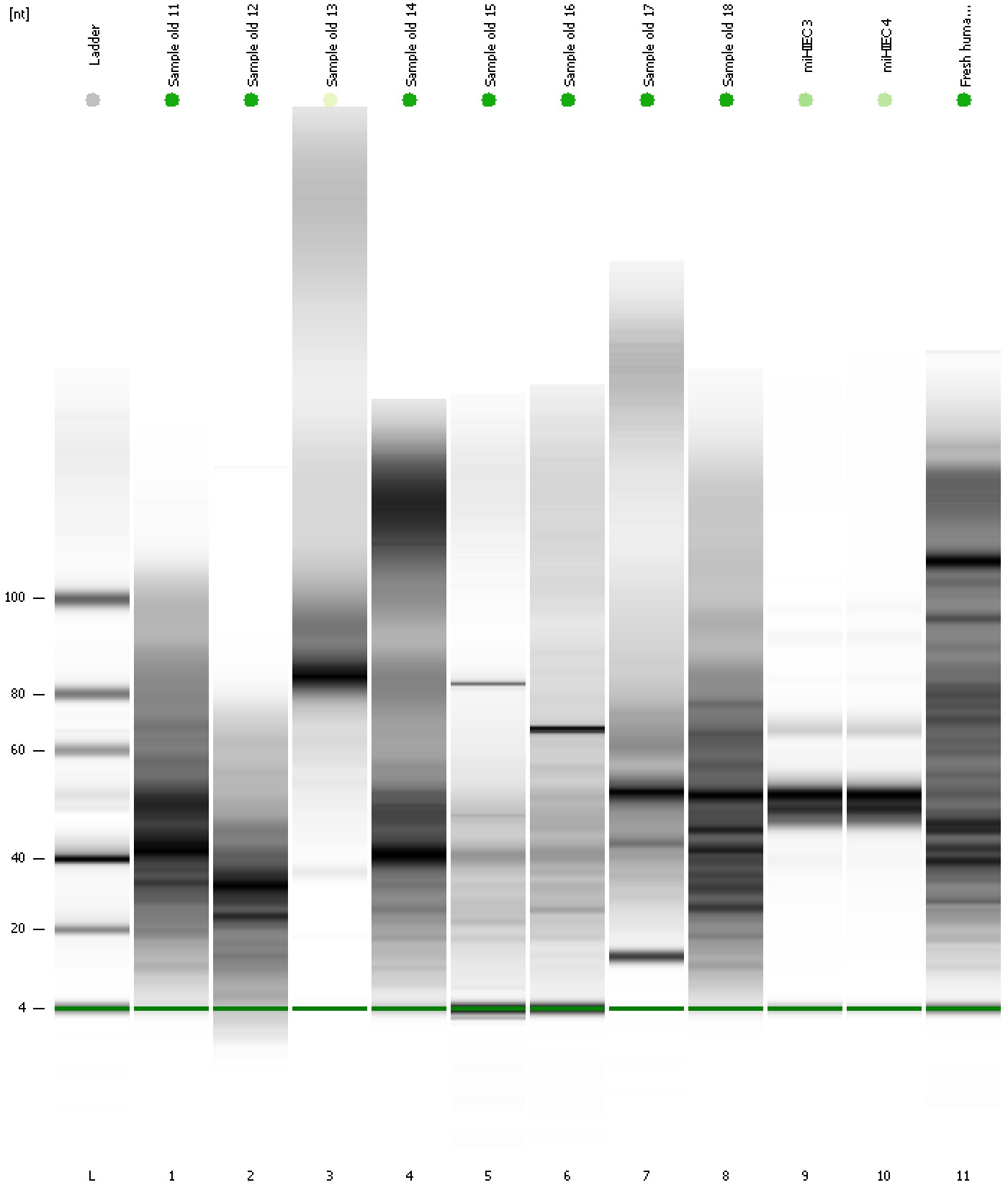
Region table for sample 11 : Fresh human milk-1 w/I

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	6,218	715	100.0	8,959.8	100	
miRNA	10	40	28	28.8	2,971.4	33	

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
Modified: 9/15/2014 2:30:59 PM

Gel Image



Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad

Created: 9/15/2014 1:56:53 PM
 Modified: 9/15/2014 2:30:59 PM

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		9/15/2014 2:28:52 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-09-15\2014-09-15_003.xad)		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/15/2014 1:56:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1