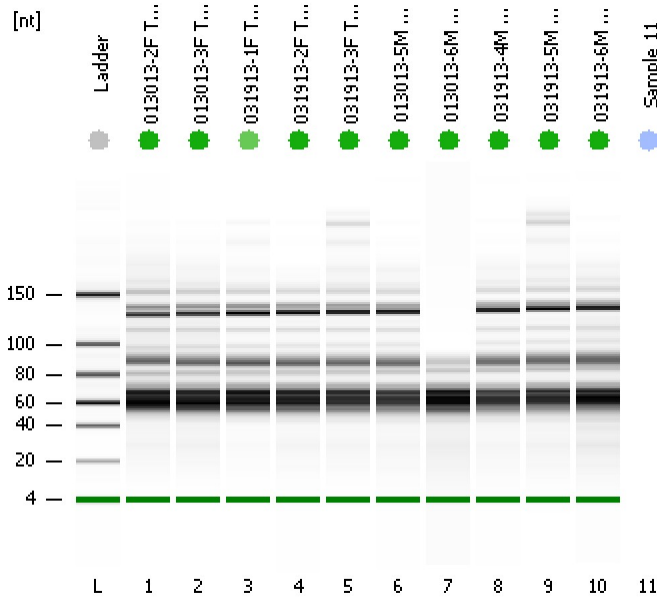


Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
Modified: 4/3/2013 10:09:29 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

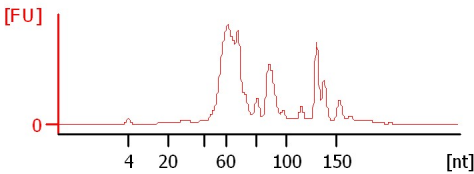
Assay Class: Small RNA
Version: 1.2
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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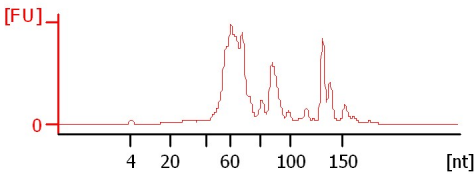
Chip Information:

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

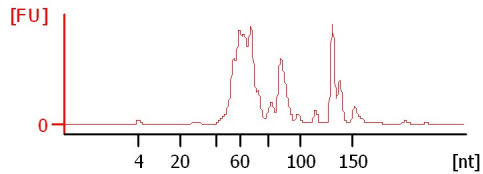
013013-2F Thymus
15 % miRNA; Concentration: 2465.40 pg/µl



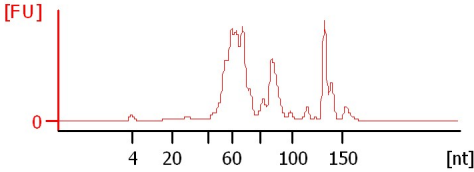
013013-3F Thymus
16 % miRNA; Concentration: 3048.70 pg/µl



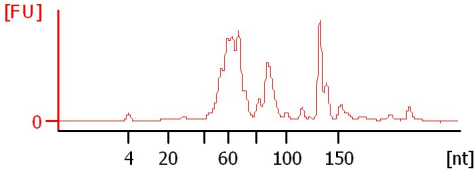
031913-1F Thymus
8 % miRNA; Concentration: 1313.70 pg/µl



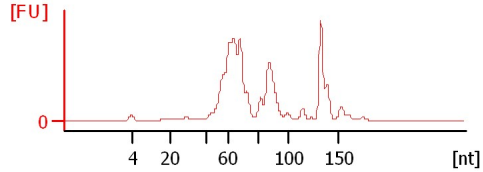
031913-2F Thymus
13 % miRNA; Concentration: 1699.60 pg/µl



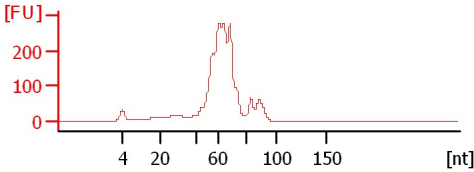
031913-3F Thymus
14 % miRNA; Concentration: 1659.40 pg/µl



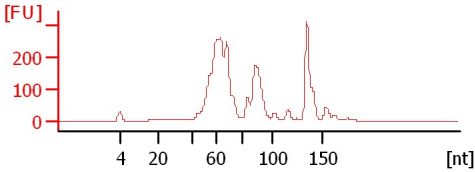
013013-5M Thymus
14 % miRNA; Concentration: 1799.80 pg/µl



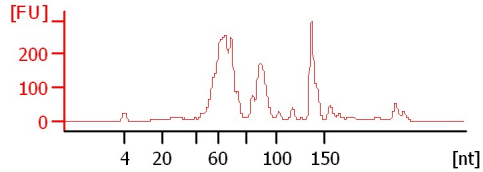
013013-6M Thymus
25 % miRNA; Concentration: 1774.50 pg/µl



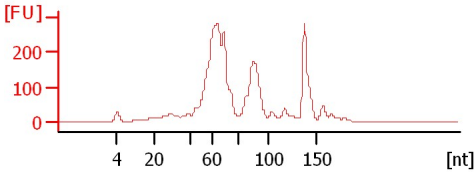
031913-4M Thymus
14 % miRNA; Concentration: 1226.20 pg/µl



031913-5M Thymus
16 % miRNA; Concentration: 1781.20 pg/µl















031913-6M Thymus
21 % miRNA; Concentration: 2333.90 pg/µl



Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
013013-2F Thymus		✓	15 % miRNA; Concentration: 2465.40 pg/μl	
013013-3F Thymus		✓	16 % miRNA; Concentration: 3048.70 pg/μl	
031913-1F Thymus		✓	8 % miRNA; Concentration: 1313.70 pg/μl	
031913-2F Thymus		✓	13 % miRNA; Concentration: 1699.60 pg/μl	
031913-3F Thymus		✓	14 % miRNA; Concentration: 1659.40 pg/μl	
013013-5M Thymus		✓	14 % miRNA; Concentration: 1799.80 pg/μl	
013013-6M Thymus		✓	25 % miRNA; Concentration: 1774.50 pg/μl	
031913-4M Thymus		✓	14 % miRNA; Concentration: 1226.20 pg/μl	
031913-5M Thymus		✓	16 % miRNA; Concentration: 1781.20 pg/μl	
031913-6M Thymus		✓	21 % miRNA; Concentration: 2333.90 pg/μl	
Sample 11				
Ladder		✓	Number of Peaks: 6	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
Modified: 4/3/2013 10:09:29 AM

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

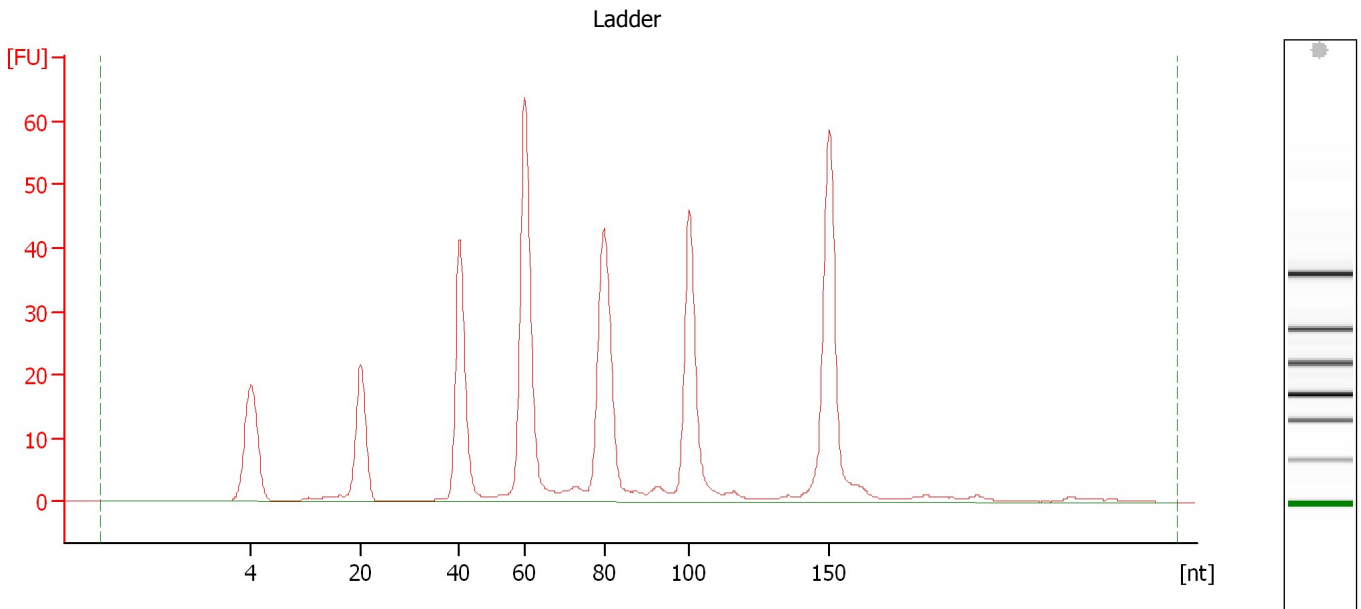
Ladder

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\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

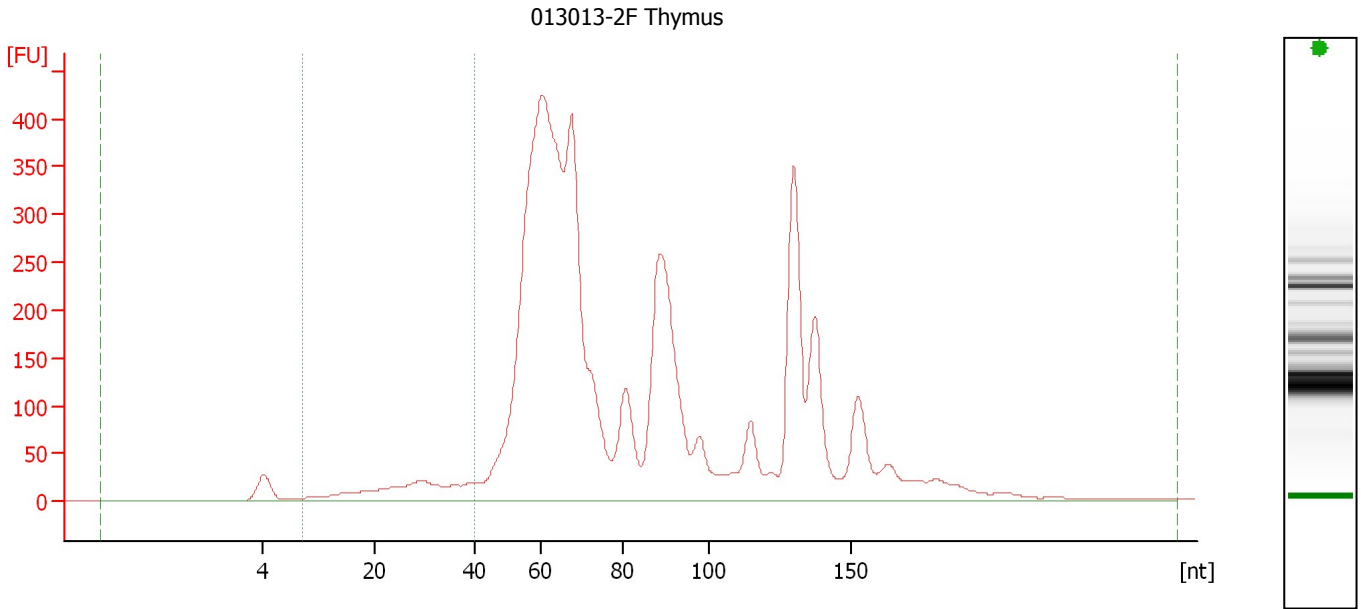
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 013013-2F Thymus

Small RNA Concentration [pg/μl]:	16,097.0	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,465.4	Result Flagging Label:	15 % miRNA; Concentration: 2465.40 pg/μl
miRNA / Small RNA Ratio [%]:	15		

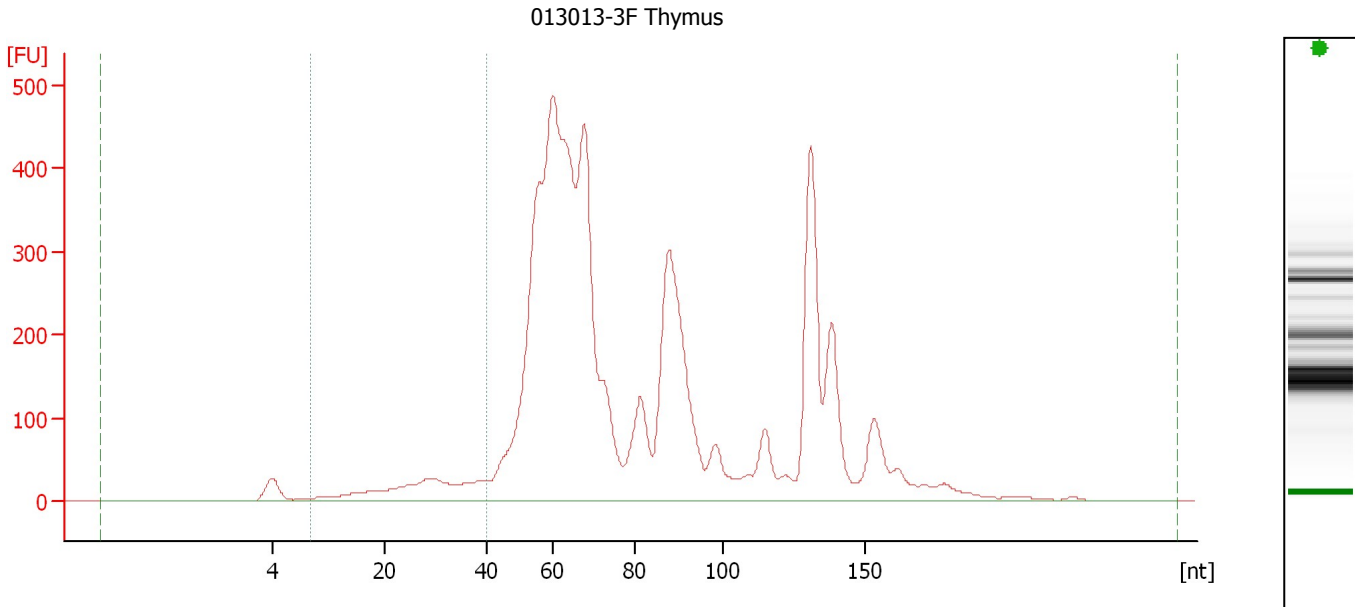
Region table for sample 1 : 013013-2F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	265	88	45.6	16,097.0	100	
miRNA	10	40	27	30.0	2,465.4	15	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 013013-3F Thymus

Small RNA Concentration [pg/μl]:	18,600.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,048.7	Result Flagging Label:	16 % miRNA; Concentration: 3048.70 pg/μl
miRNA / Small RNA Ratio [%]:	16		

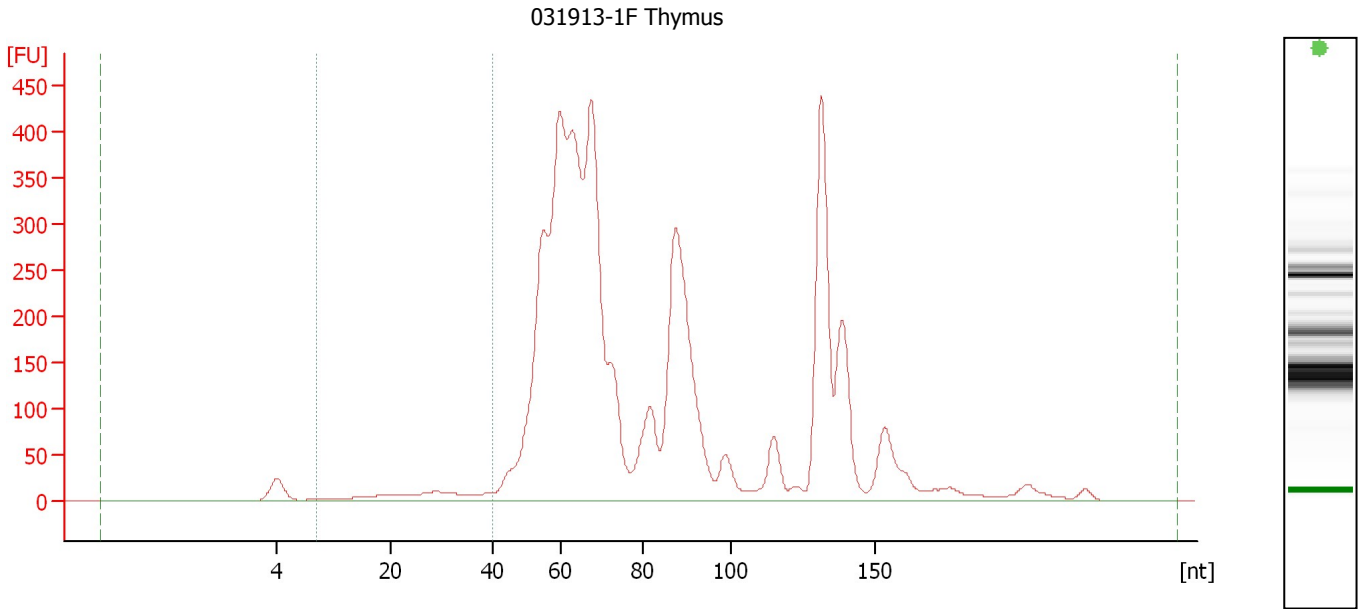
Region table for sample 2 : 013013-3F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	258	85	43.7	18,600.9	100	
miRNA	10	40	27	29.0	3,048.7	16	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 031913-1F Thymus

Small RNA Concentration [pg/μl]:	16,659.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,313.7	Result Flagging Label:	8 % miRNA; Concentration: 1313.70 pg/μl
miRNA / Small RNA Ratio [%]:	8		

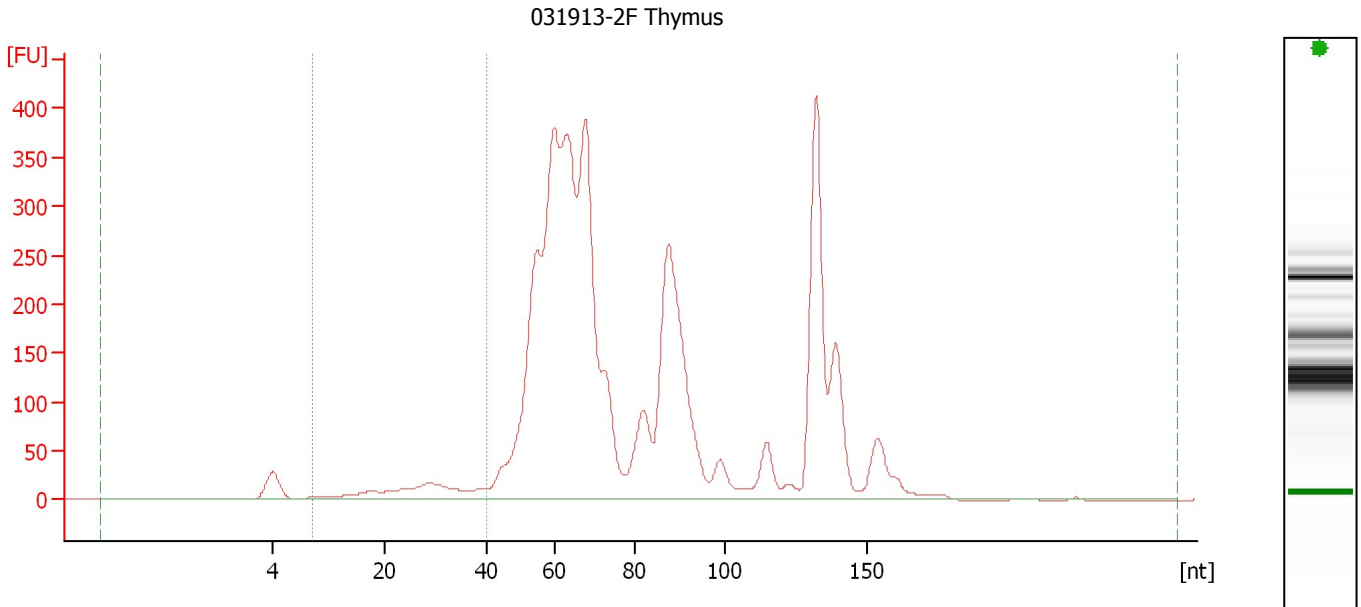
Region table for sample 3 : 031913-1F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	254	86	42.3	16,659.3	100	
miRNA	10	40	27	30.0	1,313.7	8	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 031913-2F Thymus

Small RNA Concentration [pg/μl]:	13,340.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,699.6	Result Flagging Label:	13 % miRNA; Concentration: 1699.60 pg/μl
miRNA / Small RNA Ratio [%]:	13		

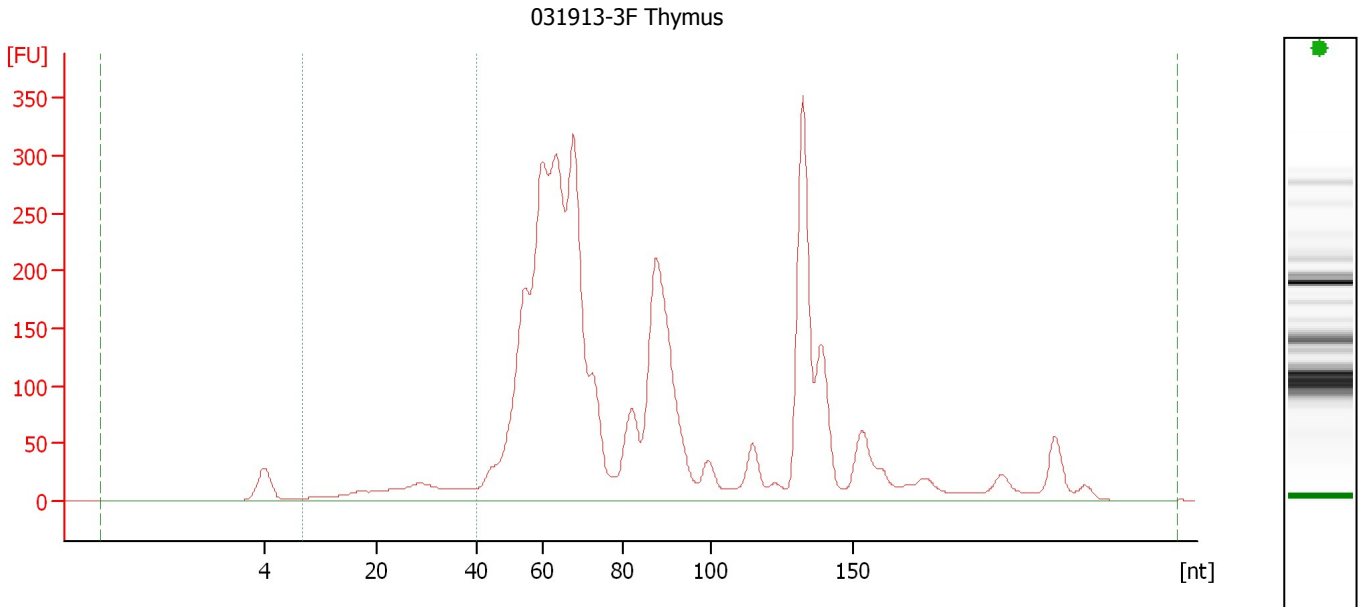
Region table for sample 4 : 031913-2F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	257	82	40.3	13,340.5	100	
miRNA	10	40	27	28.7	1,699.6	13	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 031913-3F Thymus

Small RNA Concentration [pg/μl]:	11,846.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,659.4	Result Flagging Label:	14 % miRNA; Concentration: 1659.40 pg/μl
miRNA / Small RNA Ratio [%]:	14		

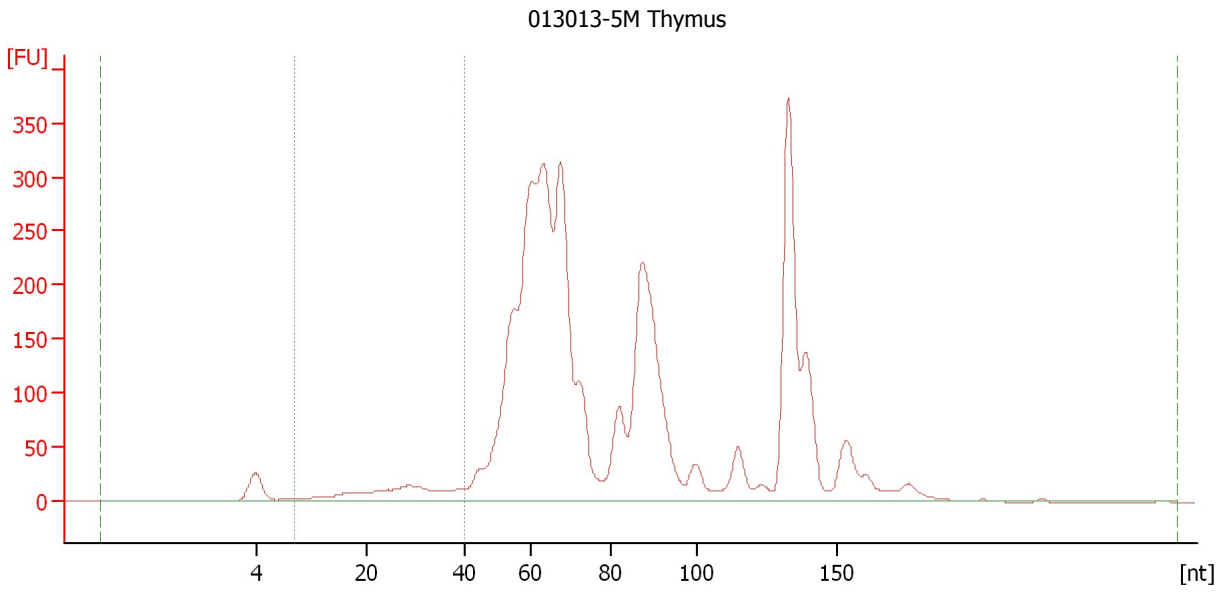
Region table for sample 5 : 031913-3F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	264	91	49.0	11,846.8	100	
miRNA	10	40	27	29.2	1,659.4	14	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 013013-5M Thymus

Small RNA Concentration [pg/μl]:	12,890.0	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,799.8	Result Flagging Label:	14 % miRNA; Concentration: 1799.80 pg/μl
miRNA / Small RNA Ratio [%]:	14		

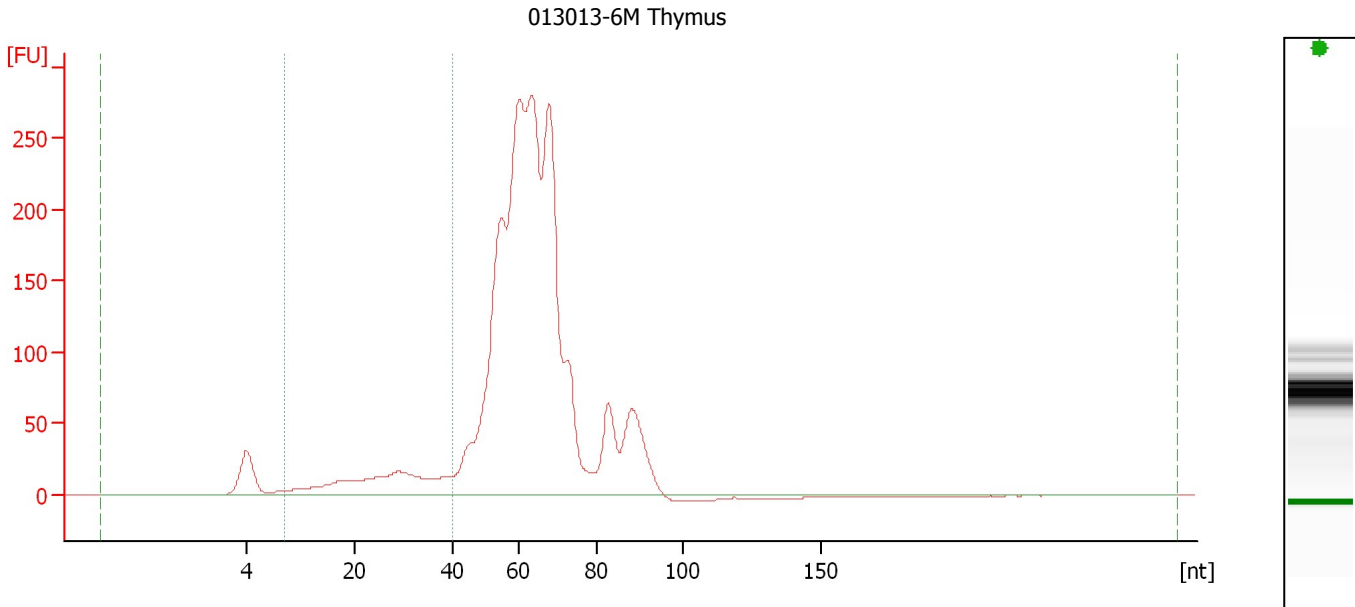
Region table for sample 6 : 013013-5M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	271	85	41.5	12,890.0	100	
miRNA	10	40	27	29.5	1,799.8	14	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 013013-6M Thymus

Small RNA Concentration [pg/μl]:	6,973.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,774.5	Result Flagging Label:	25 % miRNA; Concentration: 1774.50 pg/μl
miRNA / Small RNA Ratio [%]:	25		

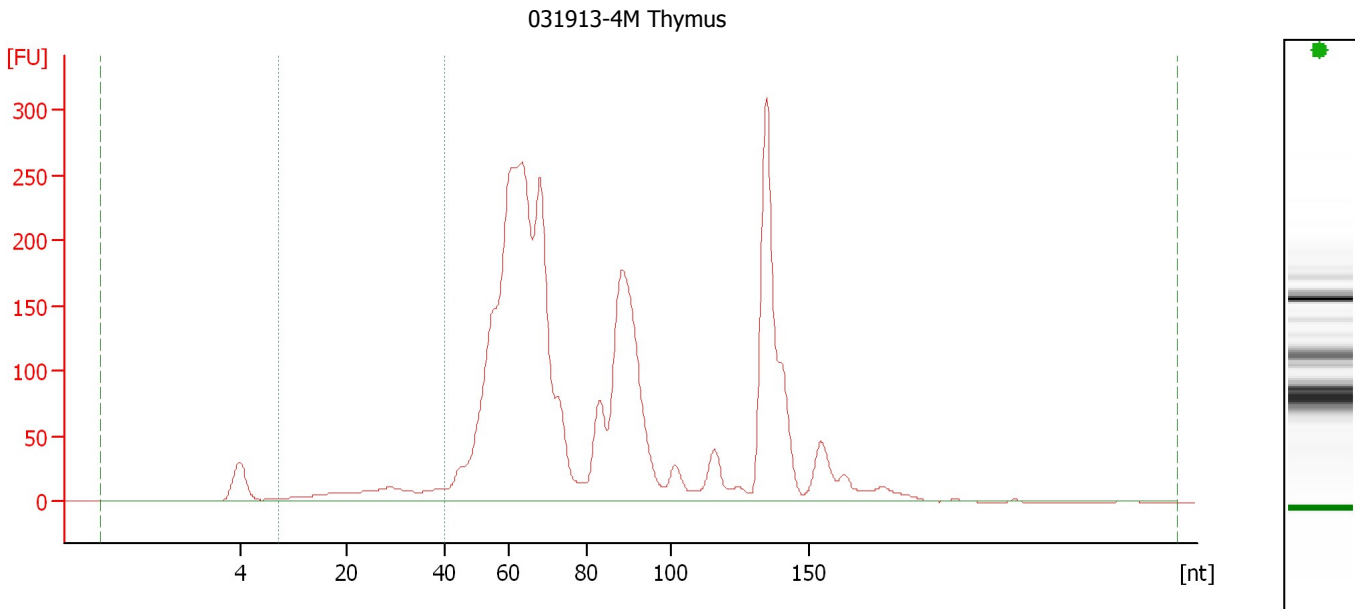
Region table for sample 7 : 013013-6M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	278	61	27.3	6,973.6	100	
miRNA	10	40	26	30.4	1,774.5	25	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 031913-4M Thymus

Small RNA Concentration [pg/μl]:	9,039.0	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,226.2	Result Flagging Label:	14 % miRNA; Concentration: 1226.20 pg/μl
miRNA / Small RNA Ratio [%]:	14		

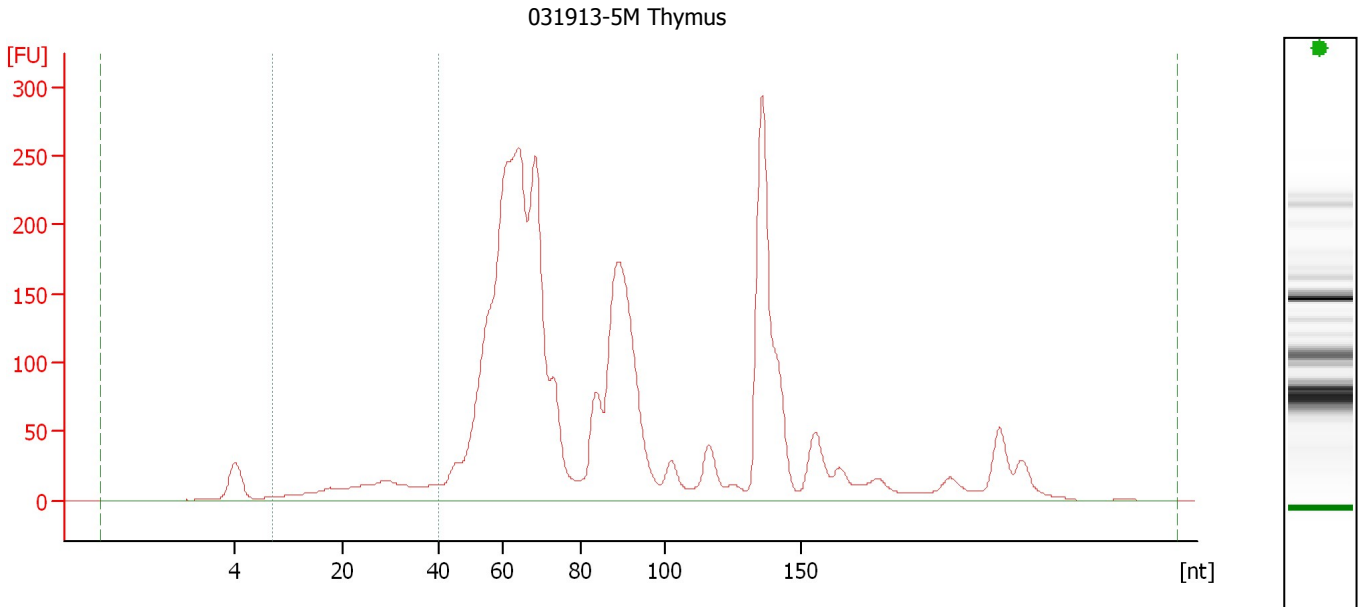
Region table for sample 8 : 031913-4M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	283	85	42.4	9,039.0	100	
miRNA	10	40	26	30.7	1,226.2	14	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 031913-5M Thymus

Small RNA Concentration [pg/μl]:	10,823.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,781.2	Result Flagging Label:	16 % miRNA; Concentration: 1781.20 pg/μl
miRNA / Small RNA Ratio [%]:	16		

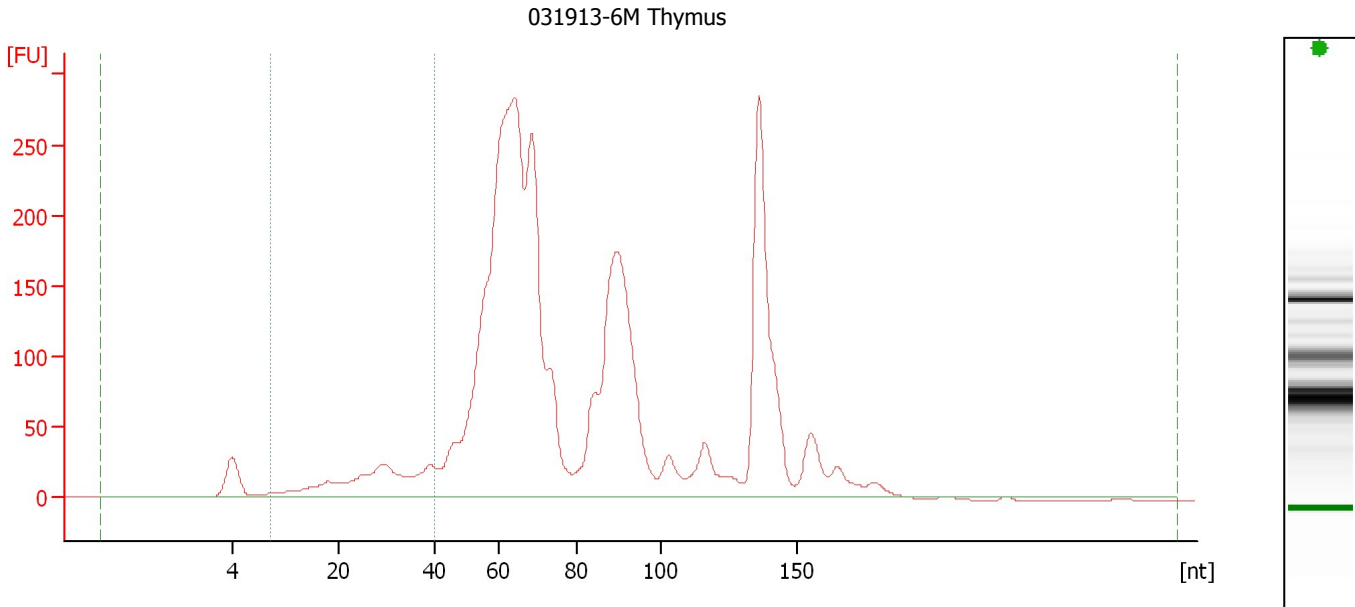
Region table for sample 9 : 031913-5M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	287	94	51.4	10,823.6	100	
miRNA	10	40	26	30.1	1,781.2	16	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 031913-6M Thymus

Small RNA Concentration [pg/μl]:	11,208.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,333.9	Result Flagging Label:	21 % miRNA; Concentration: 2333.90 pg/μl
miRNA / Small RNA Ratio [%]:	21		

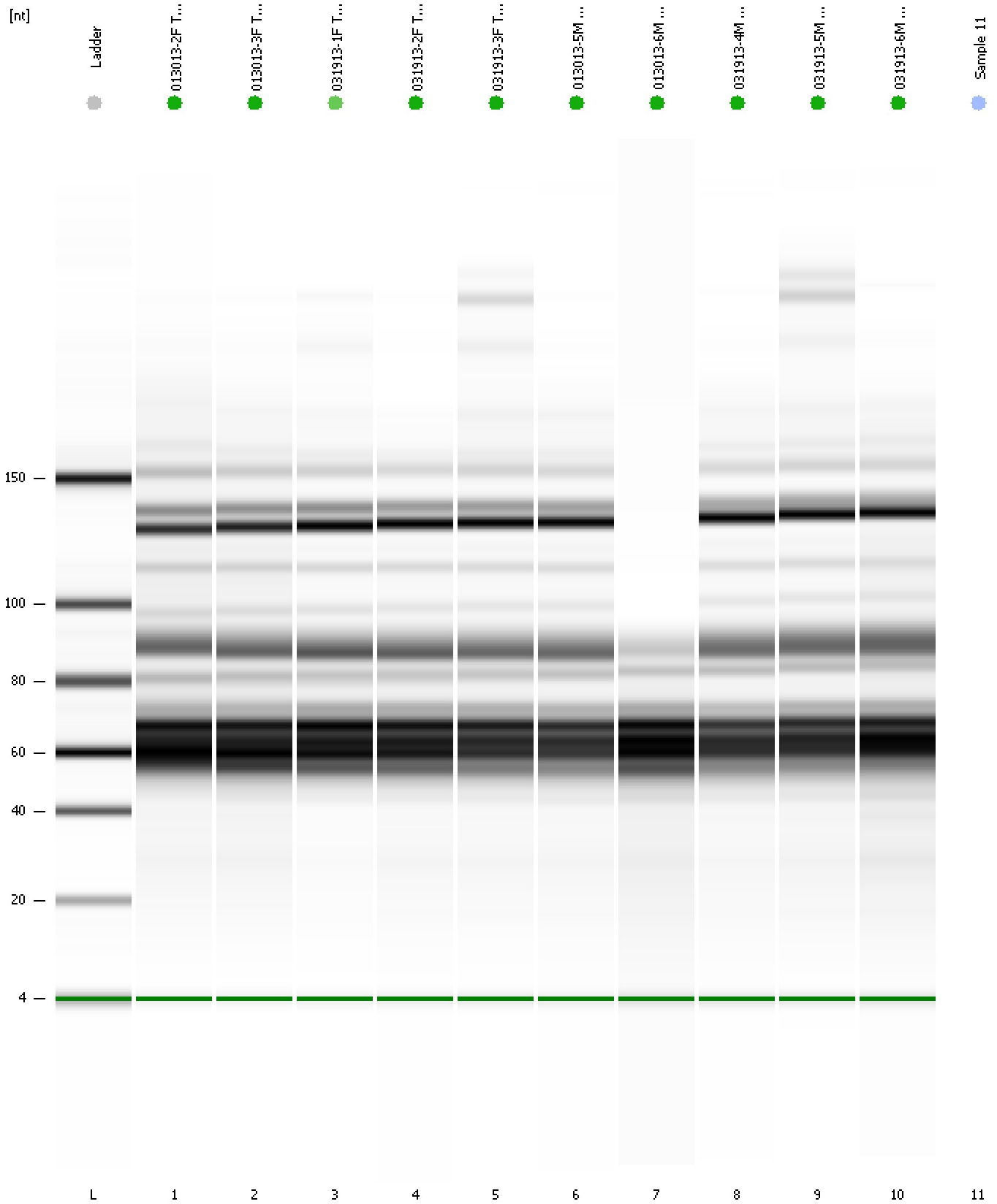
Region table for sample 10 : 031913-6M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	290	83	43.3	11,208.6	100	
miRNA	10	40	28	28.5	2,333.9	21	

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
Modified: 4/3/2013 10:09:29 AM

Gel Image

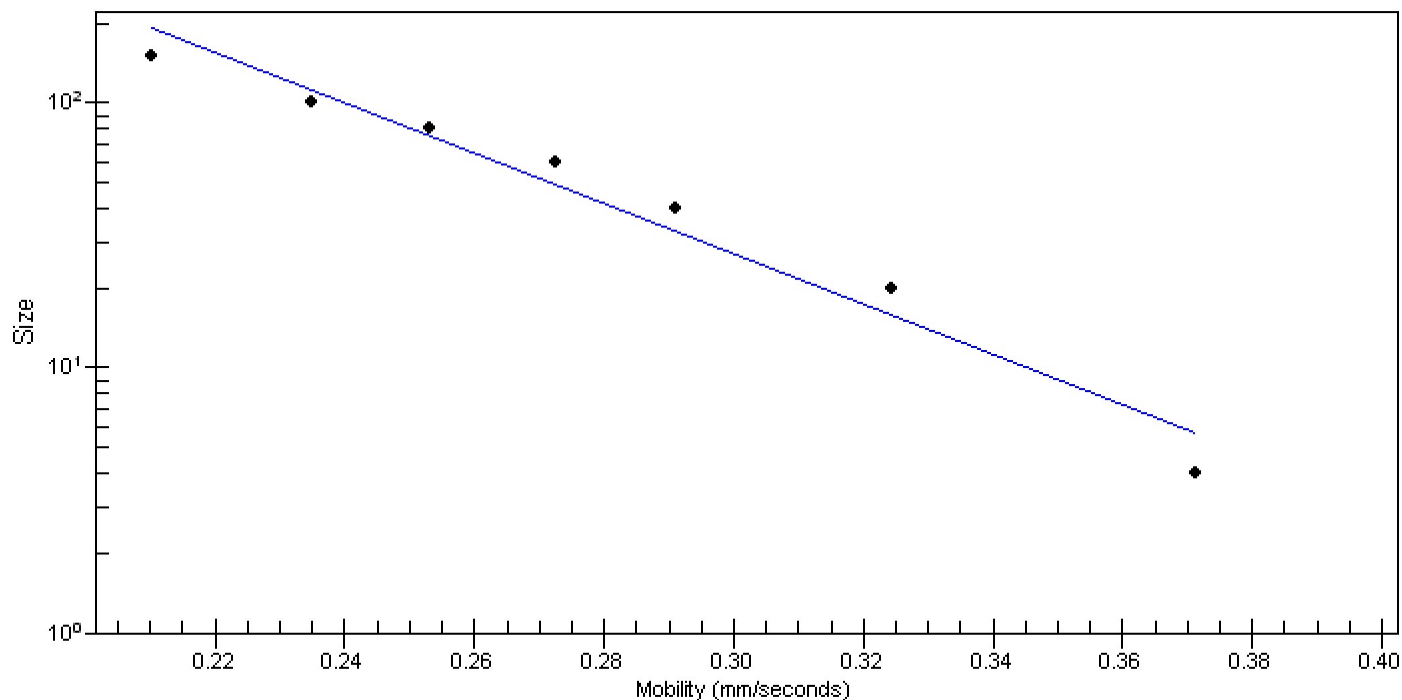


Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
Modified: 4/3/2013 10:09:29 AM

Curves

Standard Curve



Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
Modified: 4/3/2013 10:09:29 AM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad

Created: 4/3/2013 9:39:24 AM
 Modified: 4/3/2013 10:09:29 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		4/3/2013 10:09:26 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-03\2013-04-03_001.xad)		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/3/2013 9:39:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1