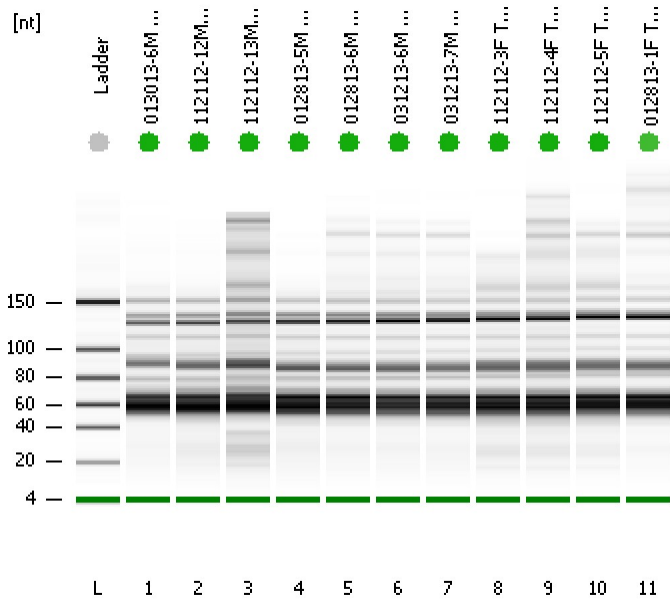


Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
Modified: 4/10/2013 11:39:22 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

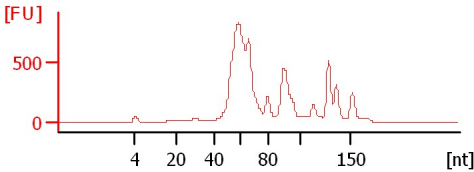
Assay Class: Small RNA
Version: 1.2
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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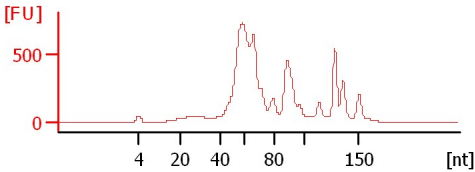
Chip Information:

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

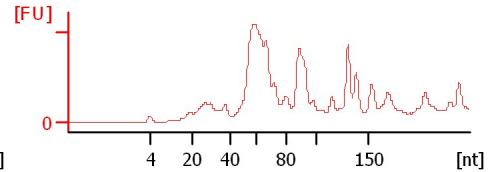
013013-6M Thymus
14 % miRNA; Concentration: 2448.40 pg/µl



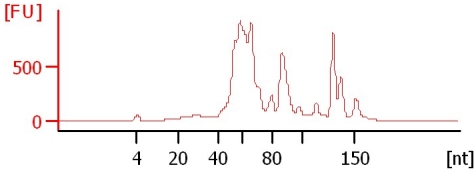
112112-12M Thymus
19 % miRNA; Concentration: 3531.70 pg/µl



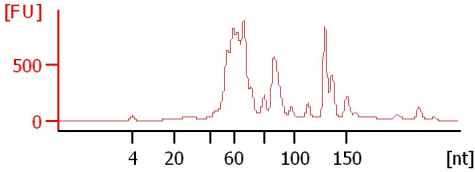
112112-13M Thymus
29 % miRNA; Concentration: 8219.30 pg/µl



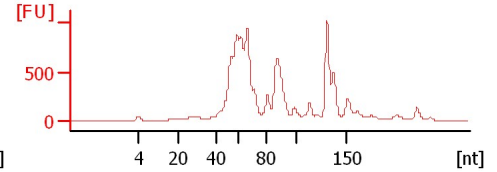
012813-5M Thymus
16 % miRNA; Concentration: 3604.80 pg/µl



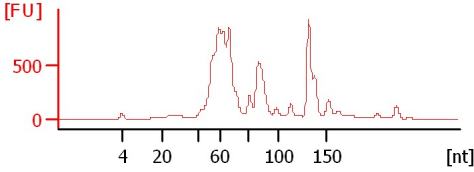
012813-6M Thymus
14 % miRNA; Concentration: 2955.30 pg/µl



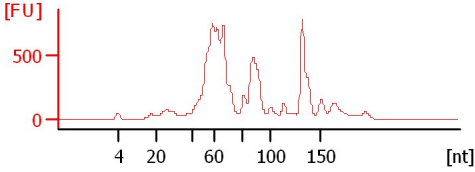
031213-6M Thymus
13 % miRNA; Concentration: 3336.90 pg/µl



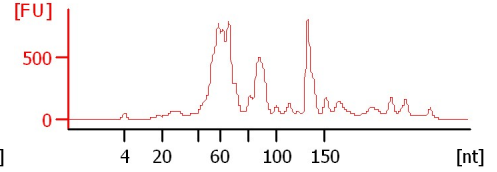
031213-7M Thymus
14 % miRNA; Concentration: 2727.70 pg/µl



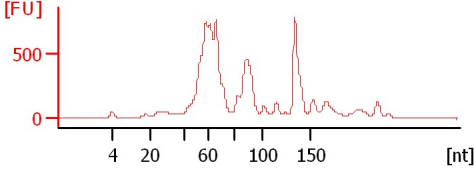
112112-3F Thymus
20 % miRNA; Concentration: 4045.10 pg/µl



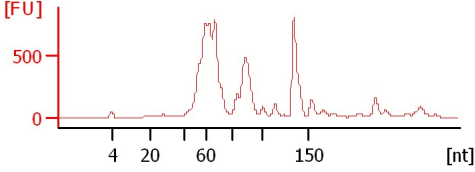
112112-4F Thymus
18 % miRNA; Concentration: 4189.80 pg/µl



112112-5F Thymus
15 % miRNA; Concentration: 3293.20 pg/µl















012813-1F Thymus
10 % miRNA; Concentration: 1905.10 pg/µl



Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
013013-6M Thymus		✓	14 % miRNA; Concentration: 2448.40 pg/μl	
112112-12M Thymus		✓	19 % miRNA; Concentration: 3531.70 pg/μl	
112112-13M Thymus		✓	29 % miRNA; Concentration: 8219.30 pg/μl	
012813-5M Thymus		✓	16 % miRNA; Concentration: 3604.80 pg/μl	
012813-6M Thymus		✓	14 % miRNA; Concentration: 2955.30 pg/μl	
031213-6M Thymus		✓	13 % miRNA; Concentration: 3336.90 pg/μl	
031213-7M Thymus		✓	14 % miRNA; Concentration: 2727.70 pg/μl	
112112-3F Thymus		✓	20 % miRNA; Concentration: 4045.10 pg/μl	
112112-4F Thymus		✓	18 % miRNA; Concentration: 4189.80 pg/μl	
112112-5F Thymus		✓	15 % miRNA; Concentration: 3293.20 pg/μl	
012813-1F Thymus		✓	10 % miRNA; Concentration: 1905.10 pg/μl	
Ladder		✓	Number of Peaks: 6	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
Modified: 4/10/2013 11:39:22 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

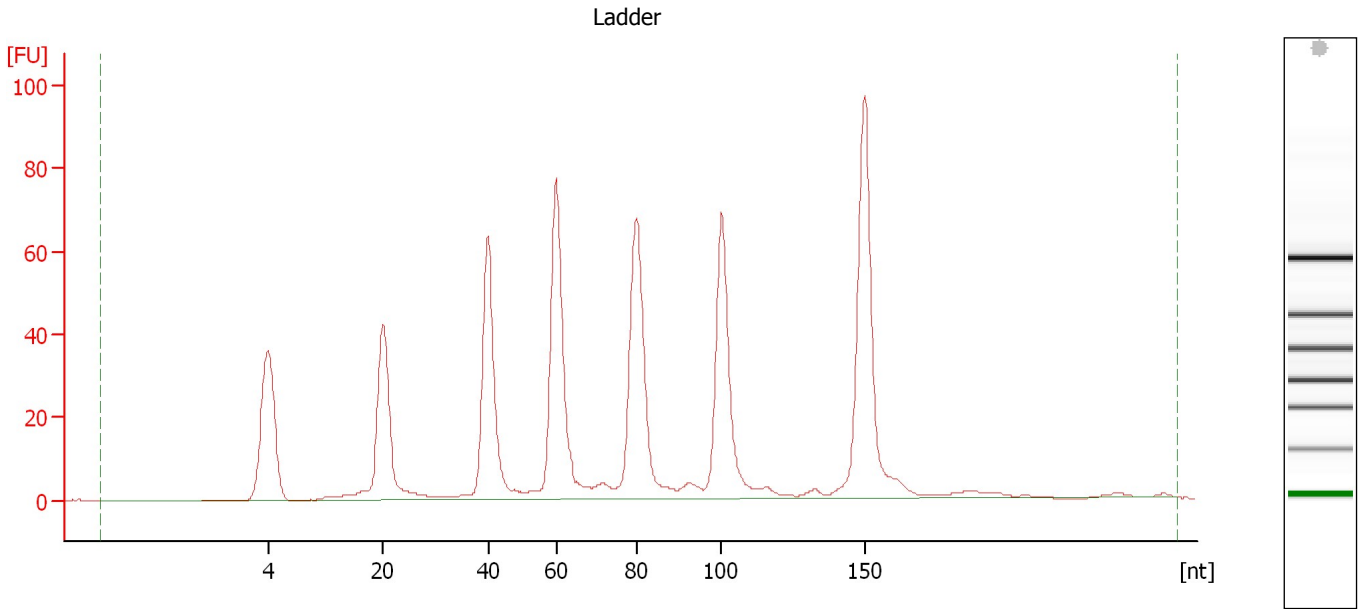
Ladder

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\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

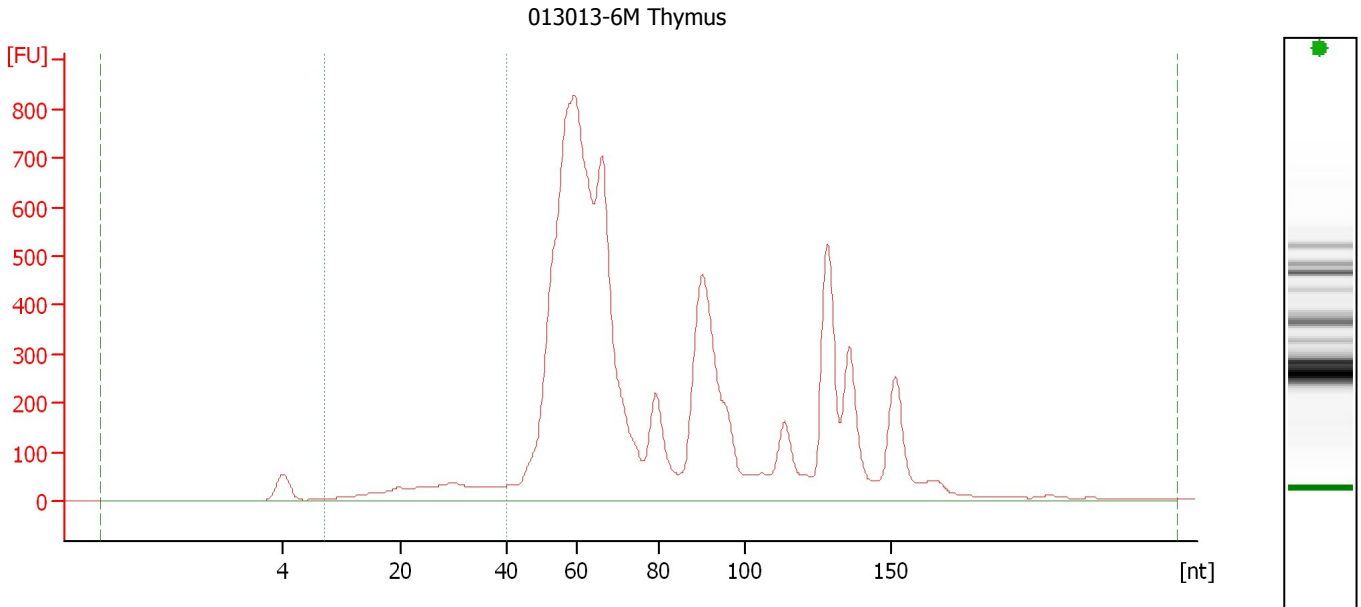
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 013013-6M Thymus

Small RNA Concentration [pg/μl]:	18,059.1	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,448.4	Result Flagging Label:	14 % miRNA; Concentration: 2448.40 pg/μl
miRNA / Small RNA Ratio [%]:	14		

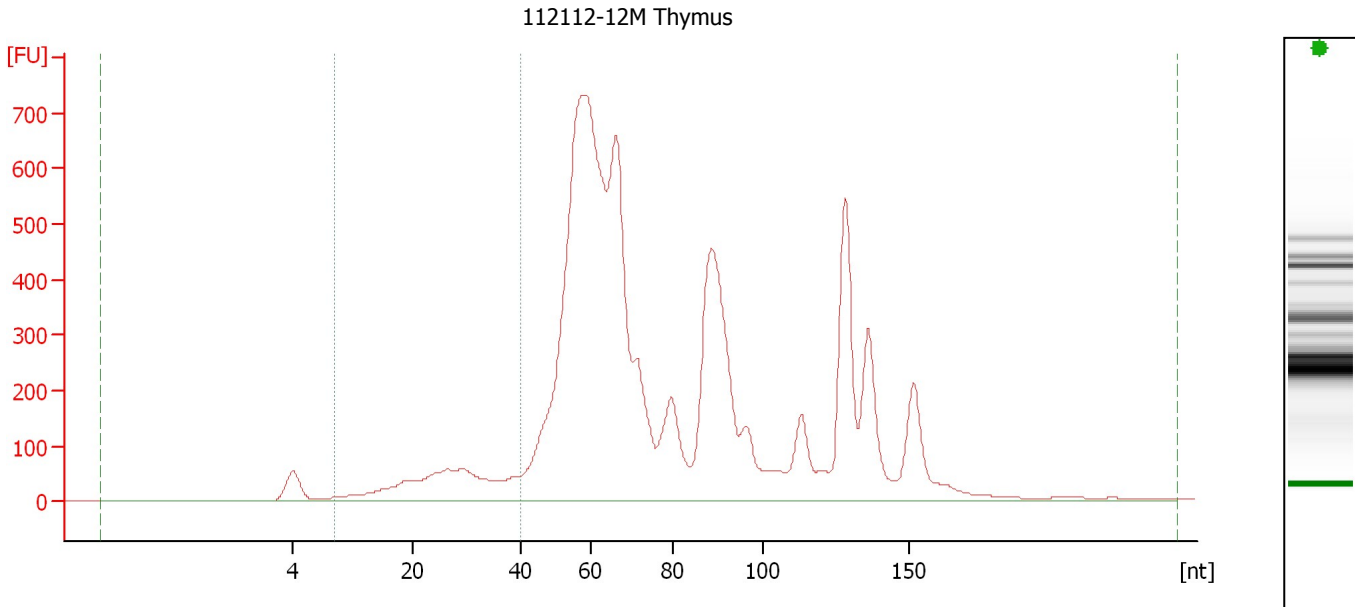
Region table for sample 1 : 013013-6M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	248	84	44.2	18,059.1	100	
miRNA	10	40	27	29.6	2,448.4	14	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 112112-12M Thymus

Small RNA Concentration [pg/μl]:	18,664.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,531.7	Result Flagging Label:	19 % miRNA; Concentration: 3531.70 pg/μl
miRNA / Small RNA Ratio [%]:	19		

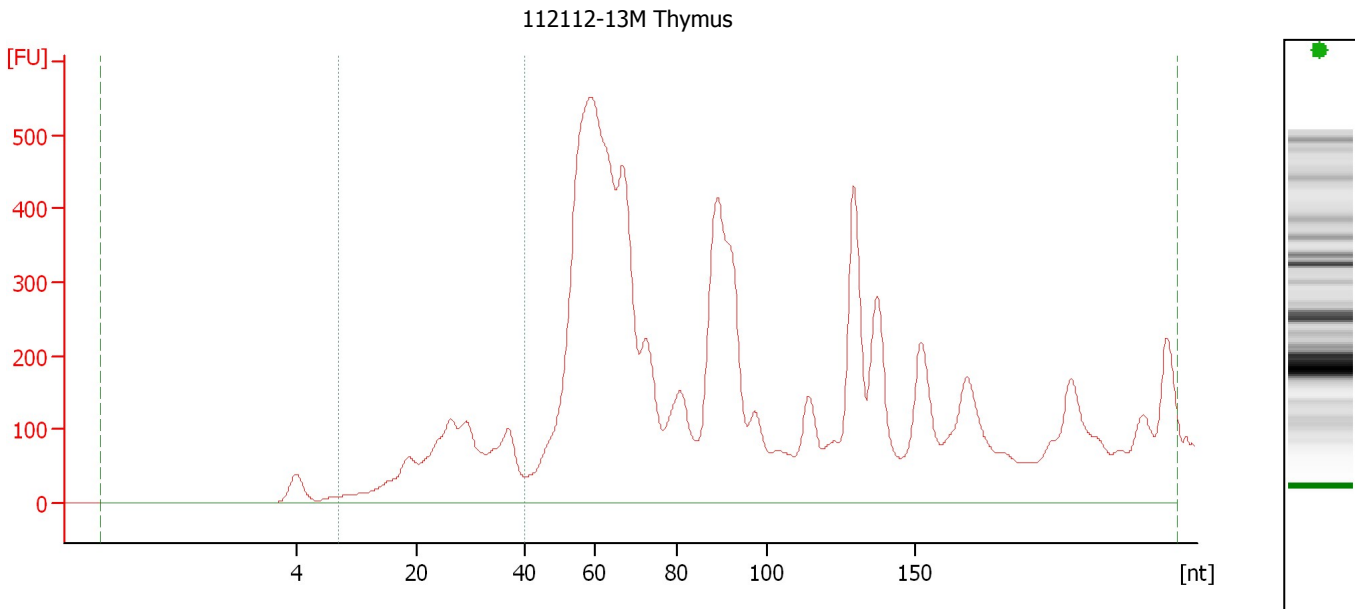
Region table for sample 2 : 112112-12M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	241	81	44.8	18,664.4	100	
miRNA	10	40	27	28.6	3,531.7	19	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 112112-13M Thymus

Small RNA Concentration [pg/μl]:	28,837.0	Result Flagging Color:	
miRNA Concentration [pg/μl]:	8,219.3	Result Flagging Label:	29 % miRNA; Concentration: 8219.30 pg/μl
miRNA / Small RNA Ratio [%]:	29		

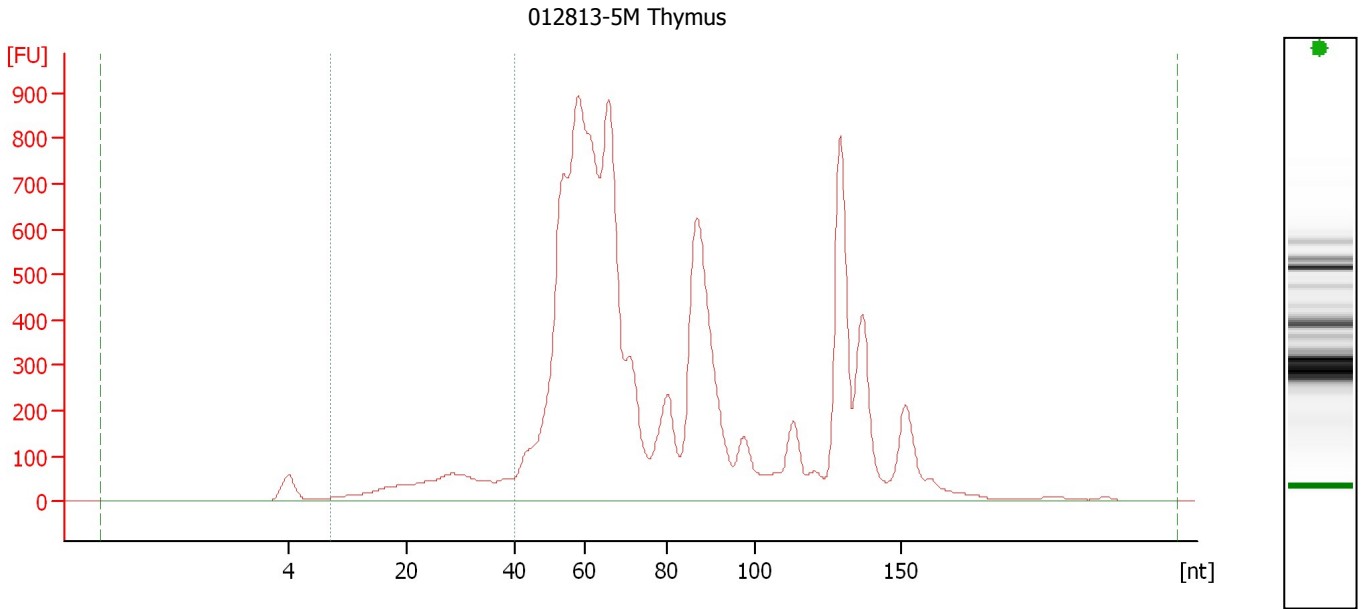
Region table for sample 3 : 112112-13M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	239	104	56.5	28,836.9	100	
miRNA	10	40	27	26.4	8,219.3	29	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 012813-5M Thymus

Small RNA Concentration [pg/μl]:	21,958.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,604.8	Result Flagging Label:	16 % miRNA; Concentration: 3604.80 pg/μl
miRNA / Small RNA Ratio [%]:	16		

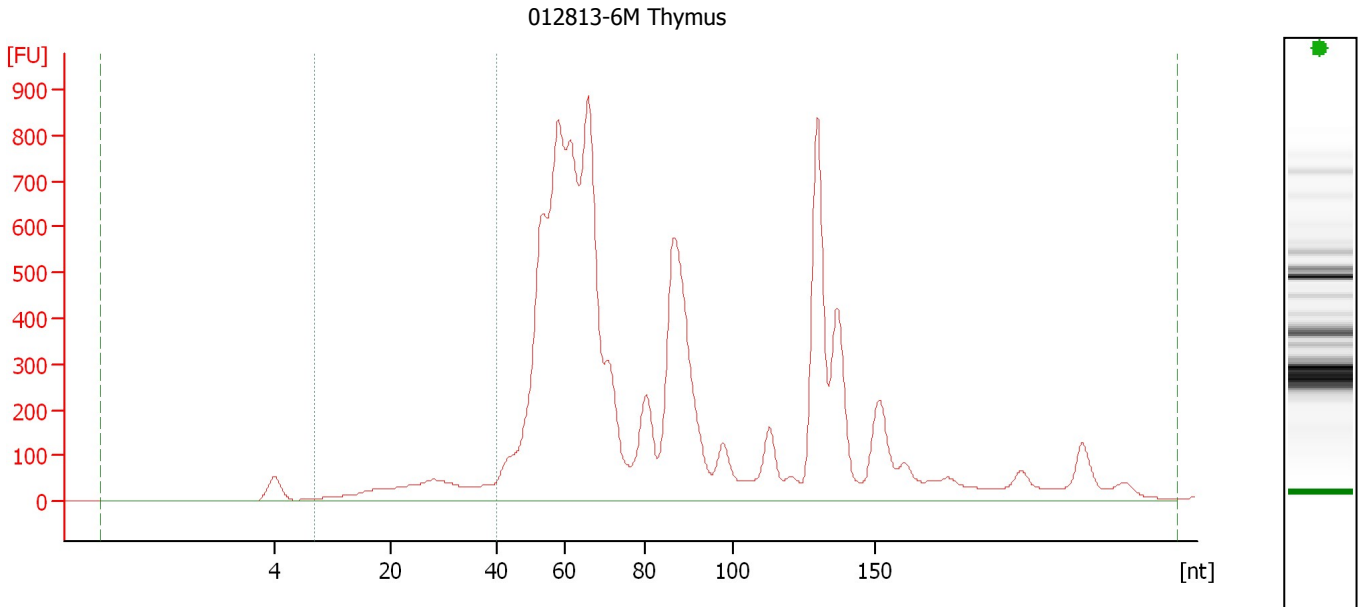
Region table for sample 4 : 012813-5M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	244	82	43.5	21,958.4	100	
miRNA	10	40	27	29.0	3,604.8	16	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 012813-6M Thymus

Small RNA Concentration [pg/μl]:	21,820.8	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,955.3	Result Flagging Label:	14 % miRNA; Concentration: 2955.30 pg/μl
miRNA / Small RNA Ratio [%]:	14		

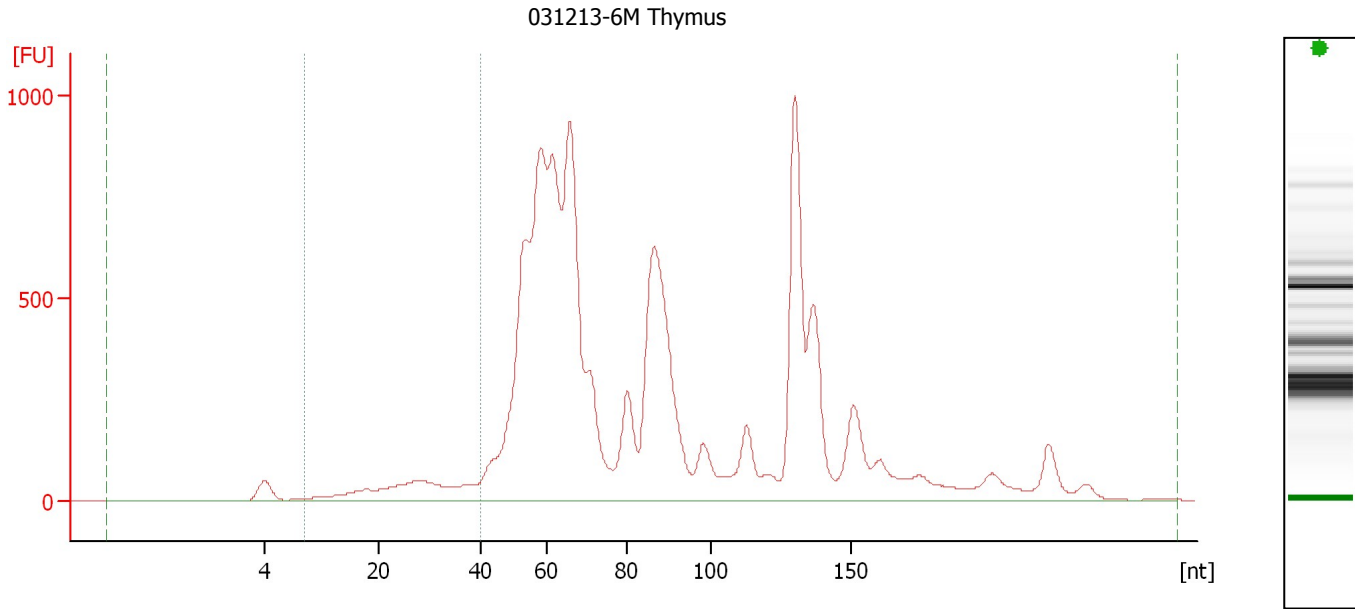
Region table for sample 5 : 012813-6M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	255	92	51.3	21,820.8	100	
miRNA	10	40	26	29.5	2,955.3	14	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 031213-6M Thymus

Small RNA Concentration [pg/μl]:	25,152.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,336.9	Result Flagging Label:	13 % miRNA; Concentration: 3336.90 pg/μl
miRNA / Small RNA Ratio [%]:	13		

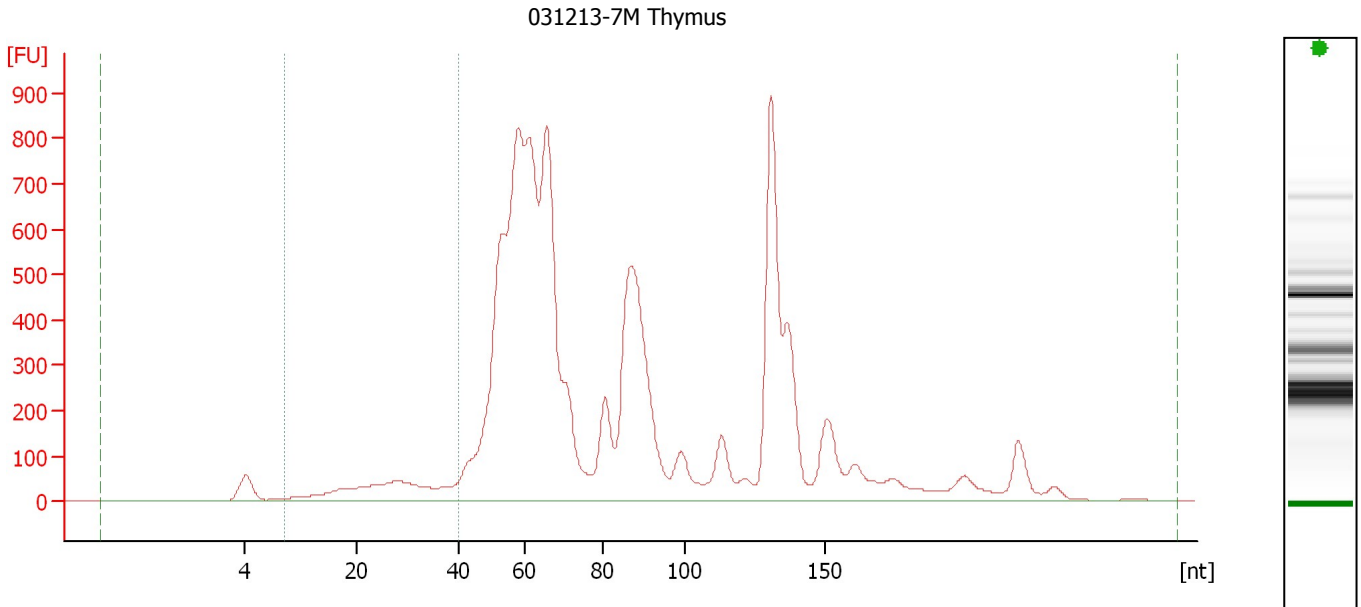
Region table for sample 6 : 031213-6M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Col or
Small RNA	0	266	93	50.0	25,152.6	100	
miRNA	10	40	27	29.3	3,336.9	13	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 031213-7M Thymus

Small RNA Concentration [pg/μl]:	19,735.1	Result Flagging Color:	
miRNA Concentration [pg/μl]:	2,727.7	Result Flagging Label:	14 % miRNA; Concentration: 2727.70 pg/μl
miRNA / Small RNA Ratio [%]:	14		

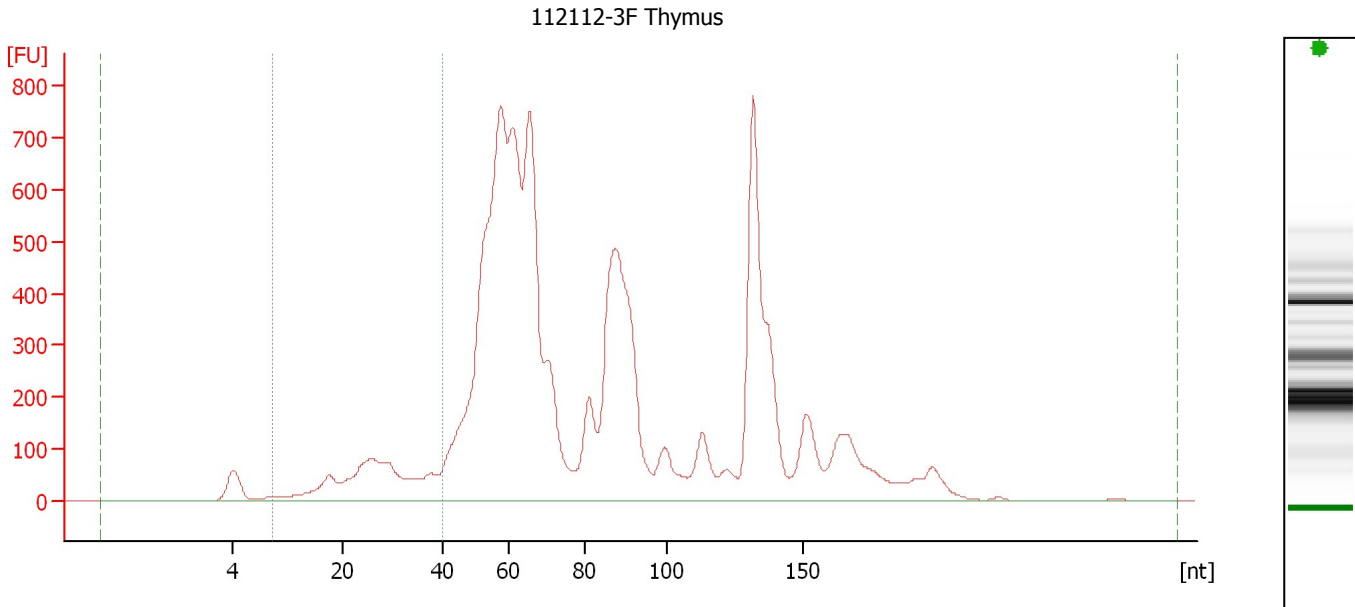
Region table for sample 7 : 031213-7M Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	277	90	50.6	19,735.1	100	
miRNA	10	40	26	29.7	2,727.7	14	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 112112-3F Thymus

Small RNA Concentration [pg/μl]:	20,205.5	Result Flagging Color:	
miRNA Concentration [pg/μl]:	4,045.1	Result Flagging Label:	20 % miRNA; Concentration: 4045.10 pg/μl
miRNA / Small RNA Ratio [%]:	20		

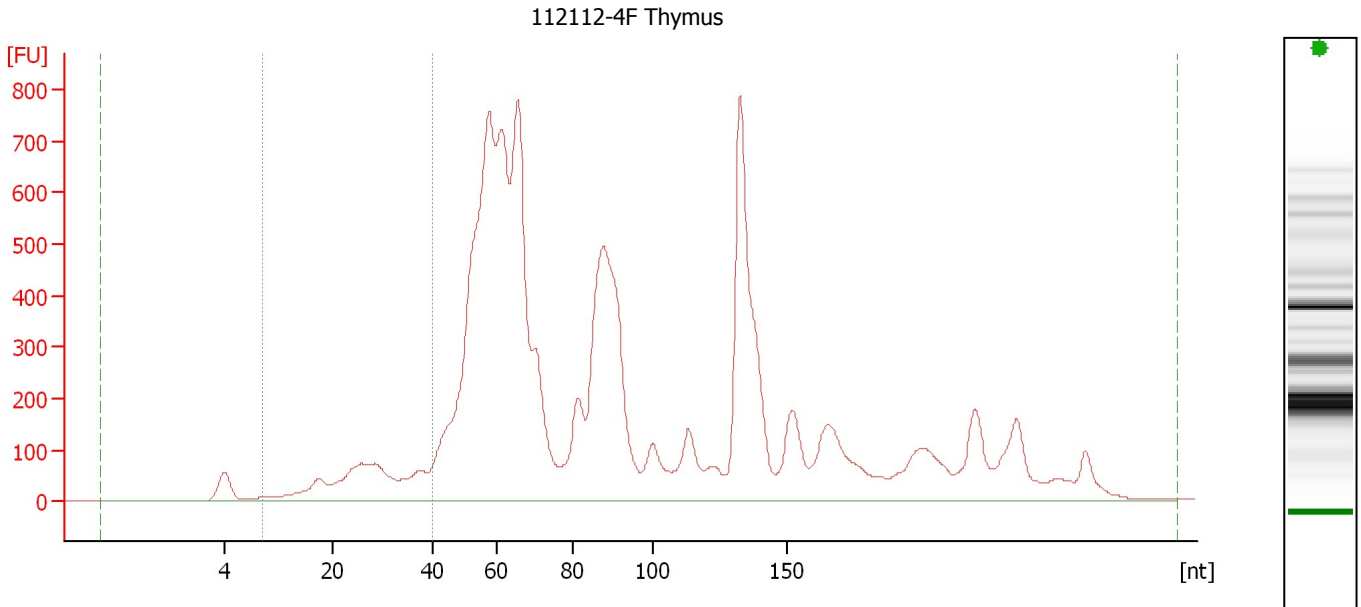
Region table for sample 8 : 112112-3F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	288	87	49.0	20,205.5	100	
miRNA	10	40	27	27.5	4,045.1	20	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 112112-4F Thymus

Small RNA Concentration [pg/μl]:	23,334.7	Result Flagging Color:	
miRNA Concentration [pg/μl]:	4,189.8	Result Flagging Label:	18 % miRNA; Concentration: 4189.80 pg/μl
miRNA / Small RNA Ratio [%]:	18		

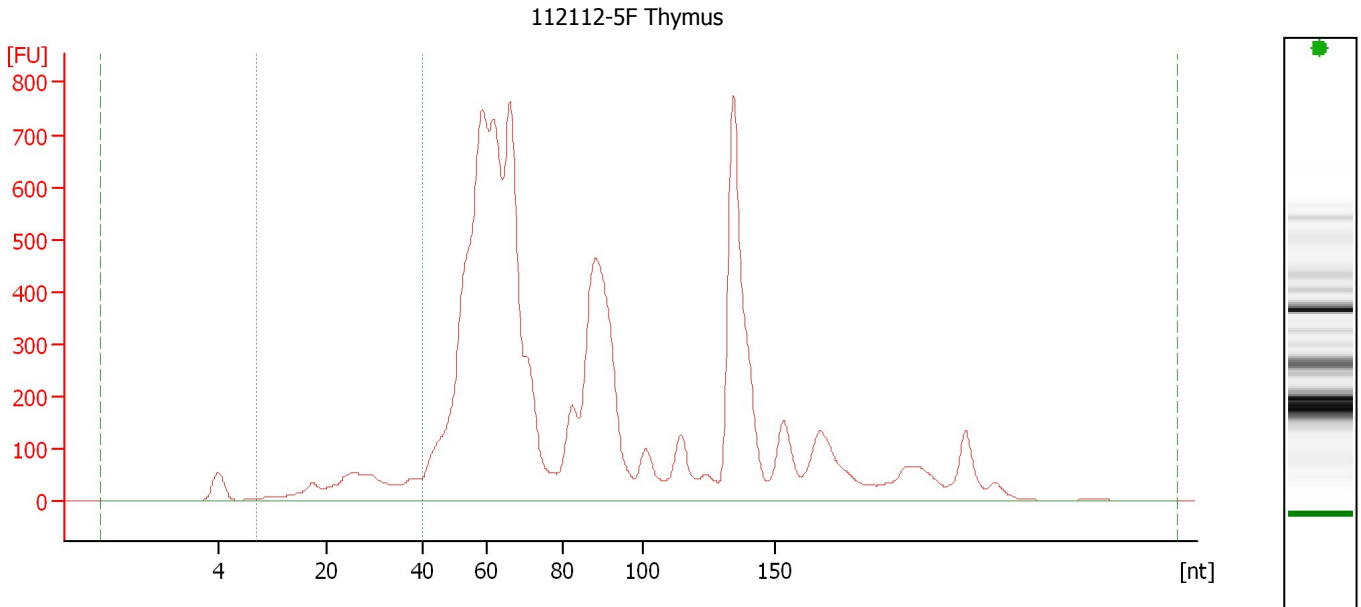
Region table for sample 9 : 112112-4F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	295	104	58.3	23,334.7	100	
miRNA	10	40	27	27.9	4,189.8	18	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 112112-5F Thymus

Small RNA Concentration [pg/μl]:	21,295.6	Result Flagging Color:	
miRNA Concentration [pg/μl]:	3,293.2	Result Flagging Label:	15 % miRNA; Concentration: 3293.20 pg/μl
miRNA / Small RNA Ratio [%]:	15		

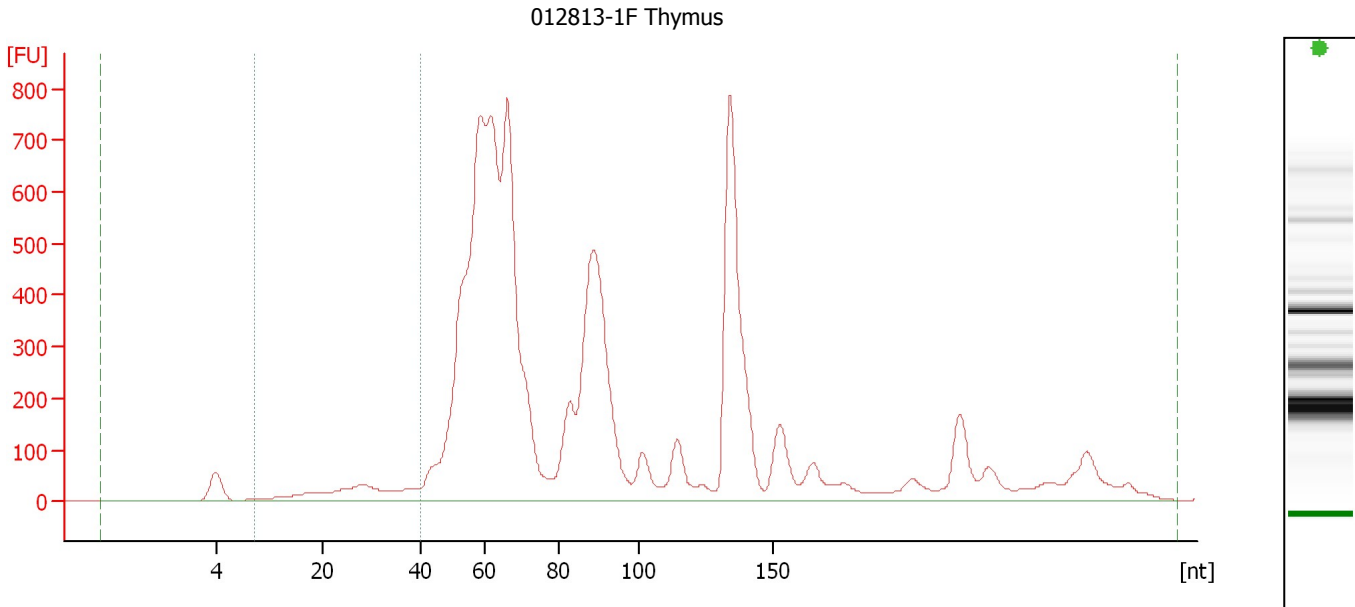
Region table for sample 10 : 112112-5F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	300	94	52.4	21,295.6	100	
miRNA	10	40	27	27.9	3,293.2	15	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 012813-1F Thymus

Small RNA Concentration [pg/μl]:	18,604.4	Result Flagging Color:	
miRNA Concentration [pg/μl]:	1,905.1	Result Flagging Label:	10 % miRNA; Concentration: 1905.10 pg/μl
miRNA / Small RNA Ratio [%]:	10		

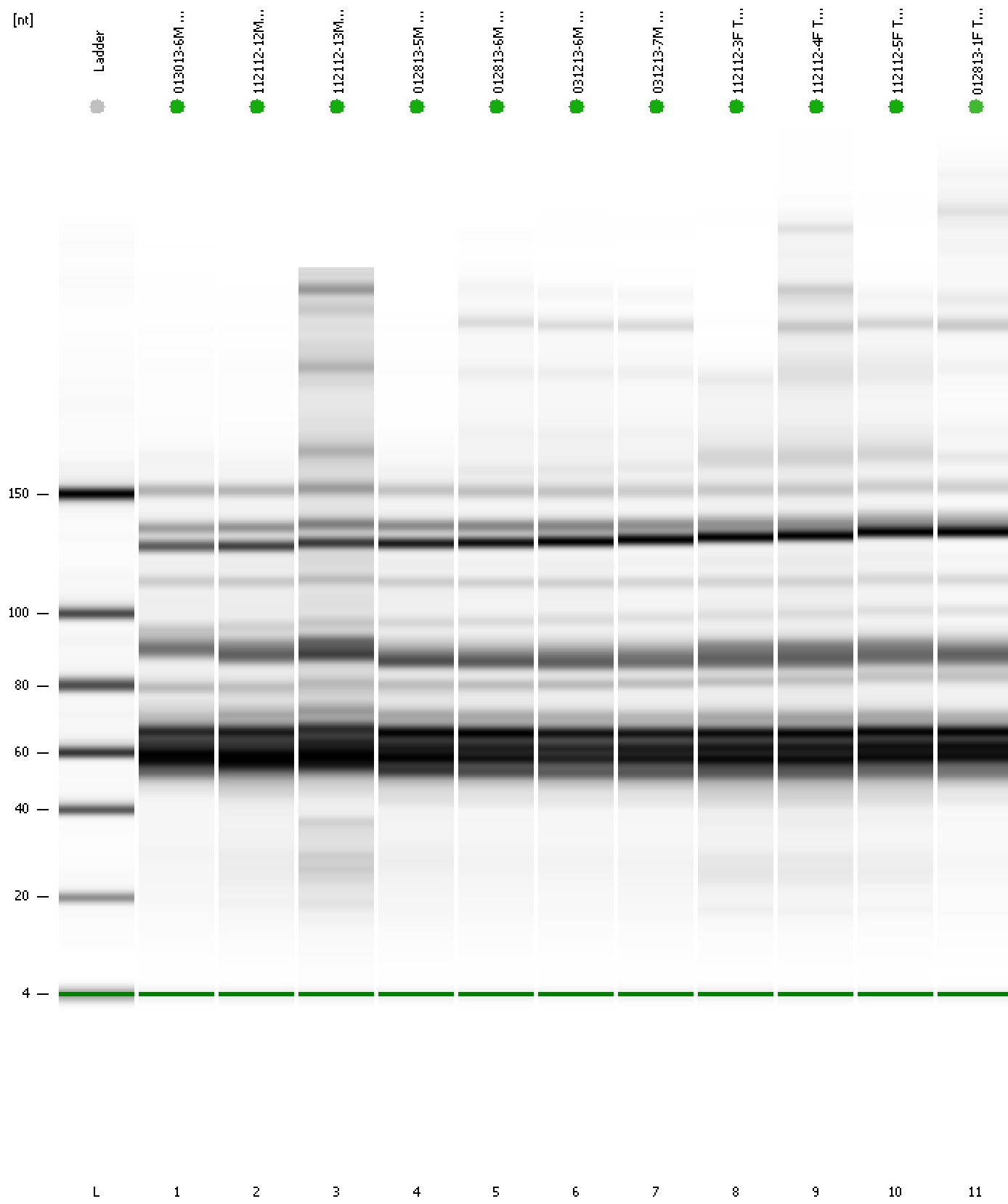
Region table for sample 11 : 012813-1F Thymus

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	302	102	59.4	18,604.4	100	
miRNA	10	40	27	29.4	1,905.1	10	

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
Modified: 4/10/2013 11:39:22 AM

Gel Image



Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad

Created: 4/10/2013 11:05:40 AM
 Modified: 4/10/2013 11:39:22 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		4/10/2013 11:37:37 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-10\2013-04-10_001.xad)		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/10/2013 11:05:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1