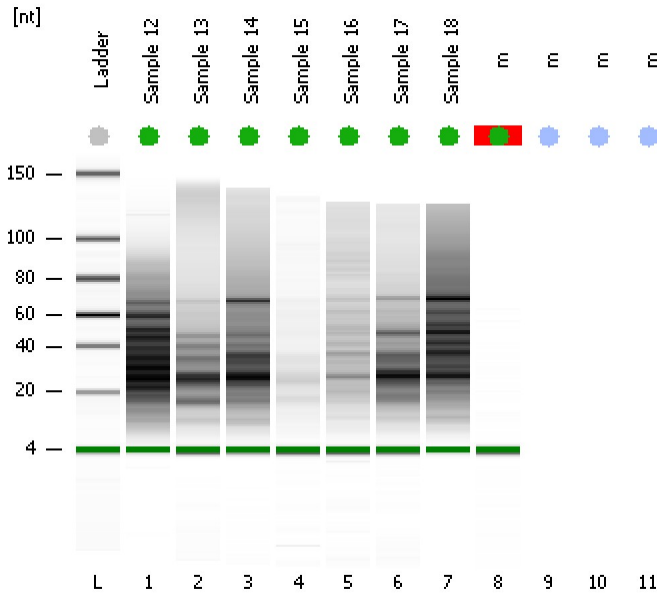


Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
Modified: 11/25/2013 4:50:37 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

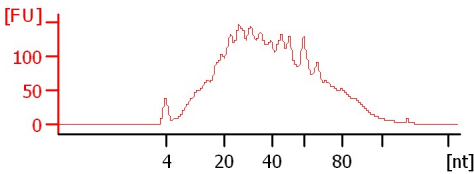
Assay Class: Small RNA
Version: 1.2
Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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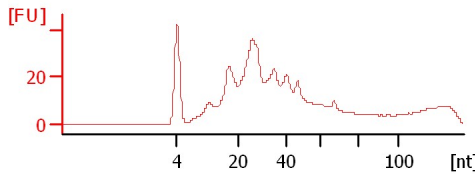
Chip Information:

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

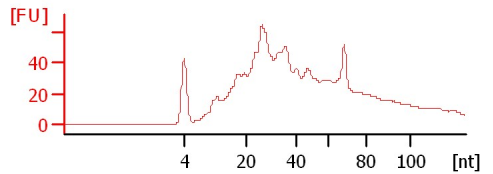
Sample 12
77 % miRNA; Concentration: 27702.40 p...



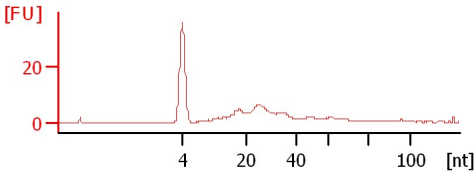
Sample 13
81 % miRNA; Concentration: 4956.30 pg/μl



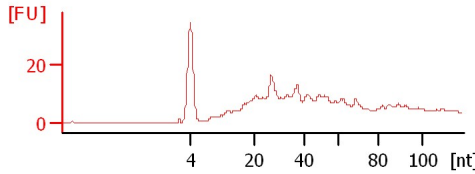
Sample 14
75 % miRNA; Concentration: 8978.90 pg/μl



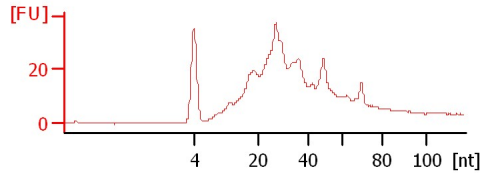
Sample 15
81 % miRNA; Concentration: 1158.30 pg/μl



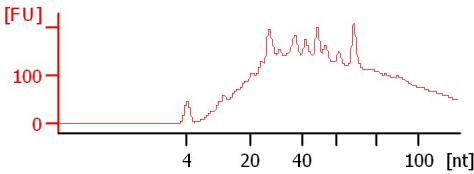
Sample 16
70 % miRNA; Concentration: 2451.40 pg/μl



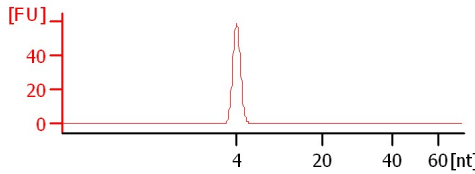
Sample 17
82 % miRNA; Concentration: 5654.10 pg/μl



Sample 18
65 % miRNA; Concentration: 23239.50 p...















m
57 % miRNA; Concentration: 13 pg/μl



Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|----------------|--------|---|---|
| Sample 12 | | ✓ | 77 % miRNA; Concentration: 27702.40 pg/μl |  |
| Sample 13 | | ✓ | 81 % miRNA; Concentration: 4956.30 pg/μl |  |
| Sample 14 | | ✓ | 75 % miRNA; Concentration: 8978.90 pg/μl |  |
| Sample 15 | | ✓ | 81 % miRNA; Concentration: 1158.30 pg/μl |  |
| Sample 16 | | ✓ | 70 % miRNA; Concentration: 2451.40 pg/μl |  |
| Sample 17 | | ✓ | 82 % miRNA; Concentration: 5654.10 pg/μl |  |
| Sample 18 | | ✓ | 65 % miRNA; Concentration: 23239.50 pg/μl |  |
| m | | ✗ | 57 % miRNA; Concentration: 13 pg/μl |  |
| m | | ✗ | |  |
| m | | ✗ | |  |
| m | | ✗ | |  |
| Ladder | | ✓ | Number of Peaks: 6 |  |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
Modified: 11/25/2013 4:50:37 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

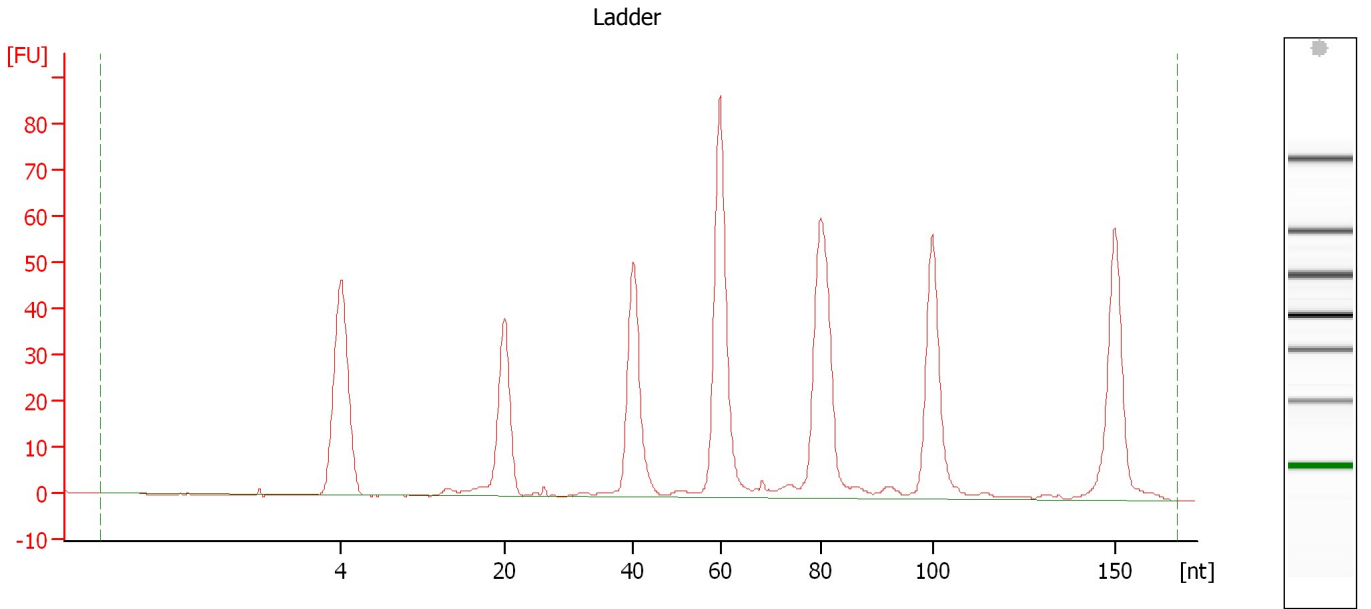
Ladder

| 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\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

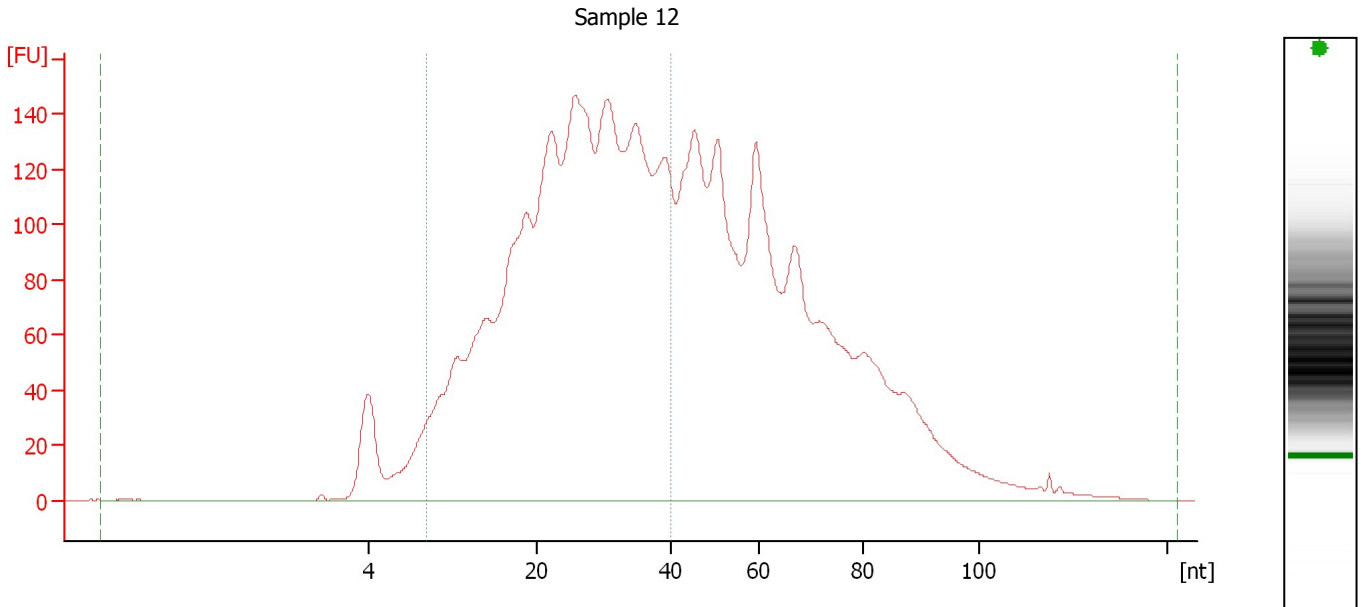
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Sample 12

| | | | |
|----------------------------------|----------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 35,789.2 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 27,702.5 | Result Flagging Label: | 77 % miRNA; Concentration: 27702.40 pg/μl |
| miRNA / Small RNA Ratio [%]: | 77 | | |

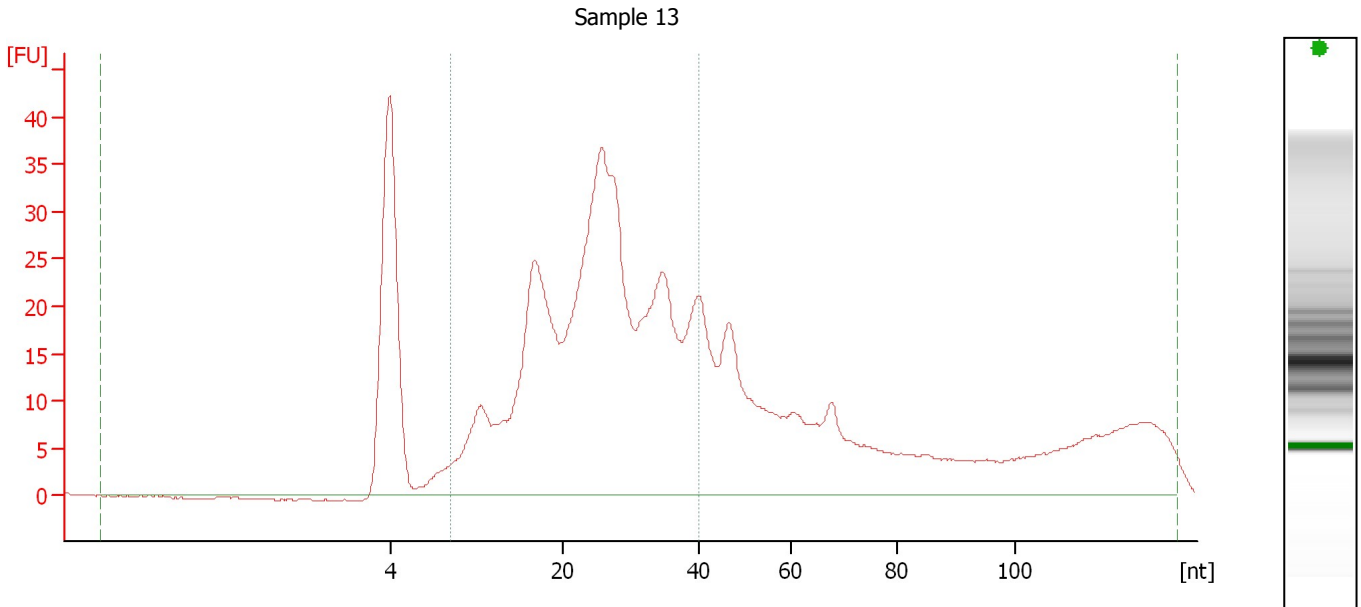
Region table for sample 1 : Sample 12

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 152 | 43 | 55.4 | 35,789.2 | 100 | |
| miRNA | 10 | 40 | 26 | 31.5 | 27,702.4 | 77 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Sample 13

| | | | |
|----------------------------------|---------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 6,145.2 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 4,956.3 | Result Flagging Label: | 81 % miRNA; Concentration: 4956.30 pg/μl |
| miRNA / Small RNA Ratio [%]: | 81 | | |

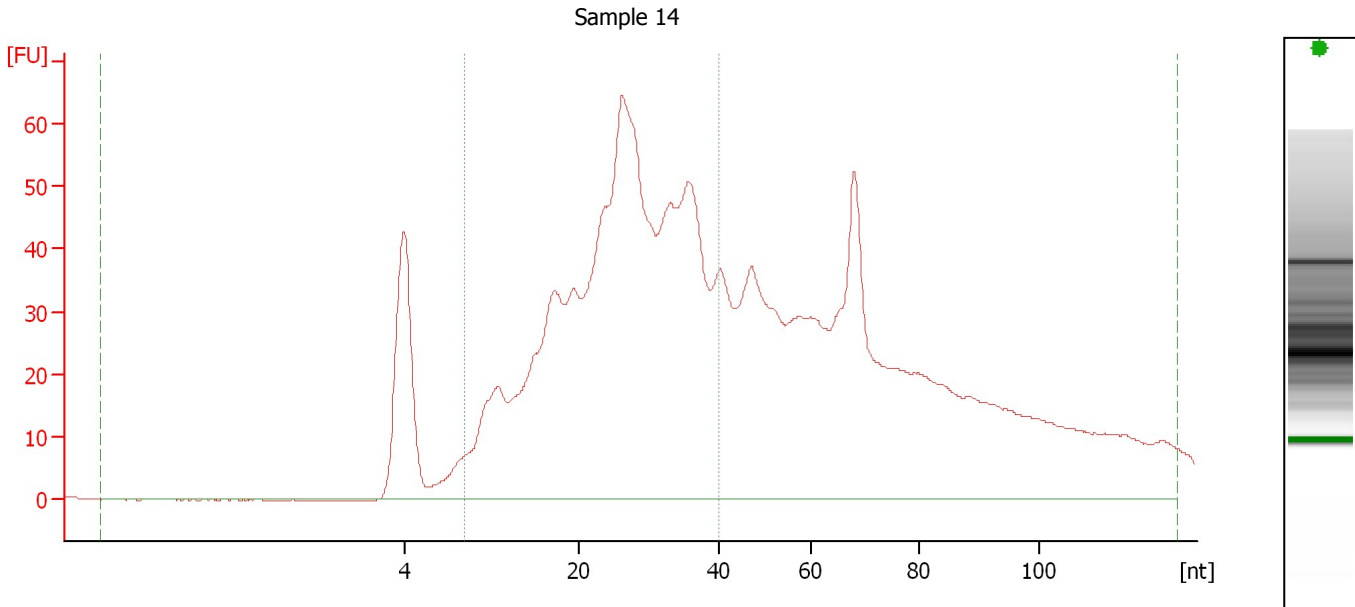
Region table for sample 2 : Sample 13

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 142 | 44 | 79.7 | 6,145.2 | 100 | |
| miRNA | 10 | 40 | 25 | 30.3 | 4,956.3 | 81 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Sample 14

| | | | |
|----------------------------------|----------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 11,970.7 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 8,978.9 | Result Flagging Label: | 75 % miRNA; Concentration: 8978.90 pg/μl |
| miRNA / Small RNA Ratio [%]: | 75 | | |

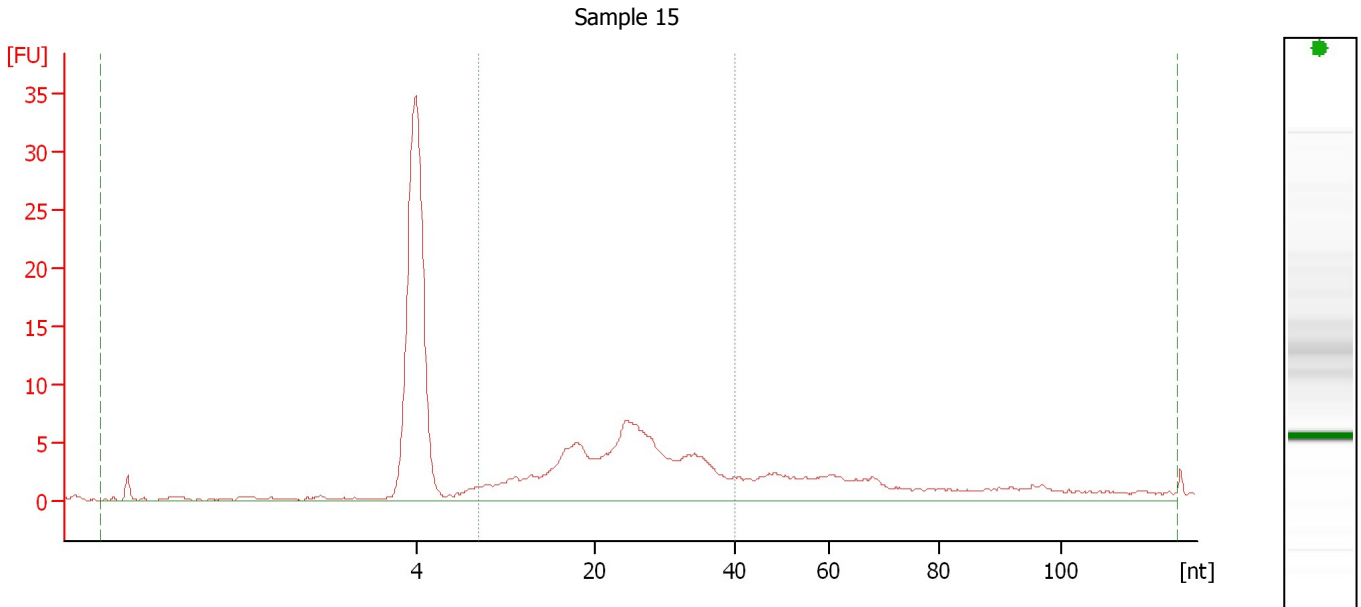
Region table for sample 3 : Sample 14

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 135 | 48 | 63.8 | 11,970.7 | 100 | |
| miRNA | 10 | 40 | 26 | 30.3 | 8,978.9 | 75 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Sample 15

| | | | |
|----------------------------------|---------|------------------------|---|
| Small RNA Concentration [pg/μl]: | 1,432.7 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 1,158.3 | Result Flagging Label: | 81 % miRNA; Concentration: 1158.30 pg/μl |
| miRNA / Small RNA Ratio [%]: | 81 | | |

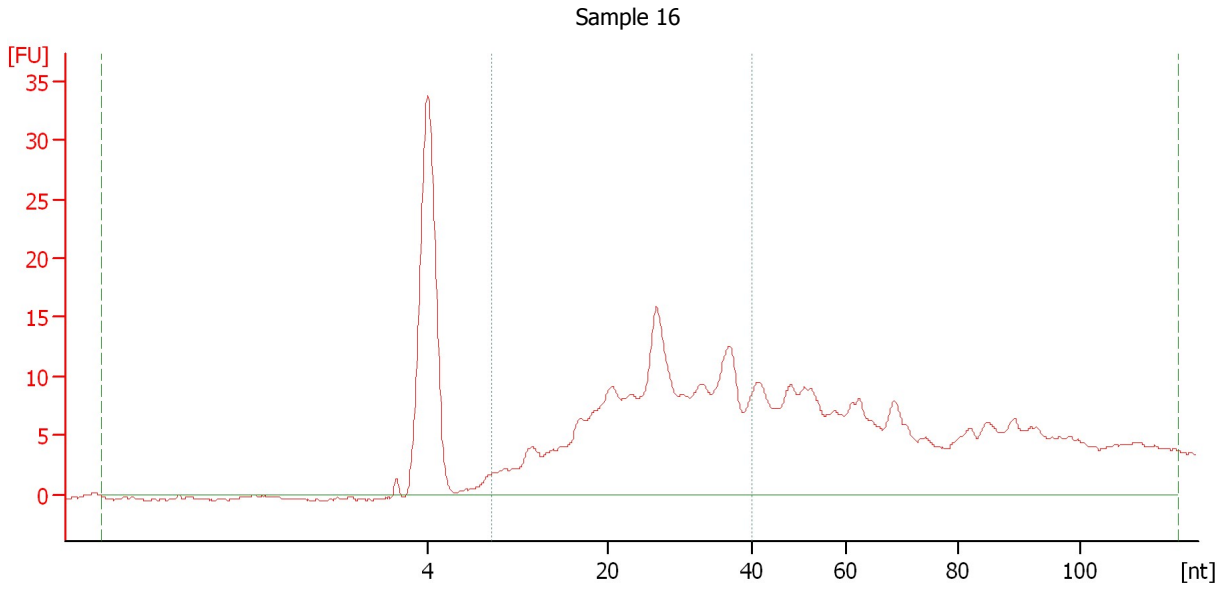
Region table for sample 4 : Sample 15

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|--|
| Small RNA | 0 | 129 | 30 | 99.5 | 1,432.7 | 100 | |
| miRNA | 10 | 40 | 24 | 30.9 | 1,158.3 | 81 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Sample 16

| | | | |
|----------------------------------|---------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 3,478.4 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 2,451.4 | Result Flagging Label: | 70 % miRNA; Concentration: 2451.40 pg/μl |
| miRNA / Small RNA Ratio [%]: | 70 | | |

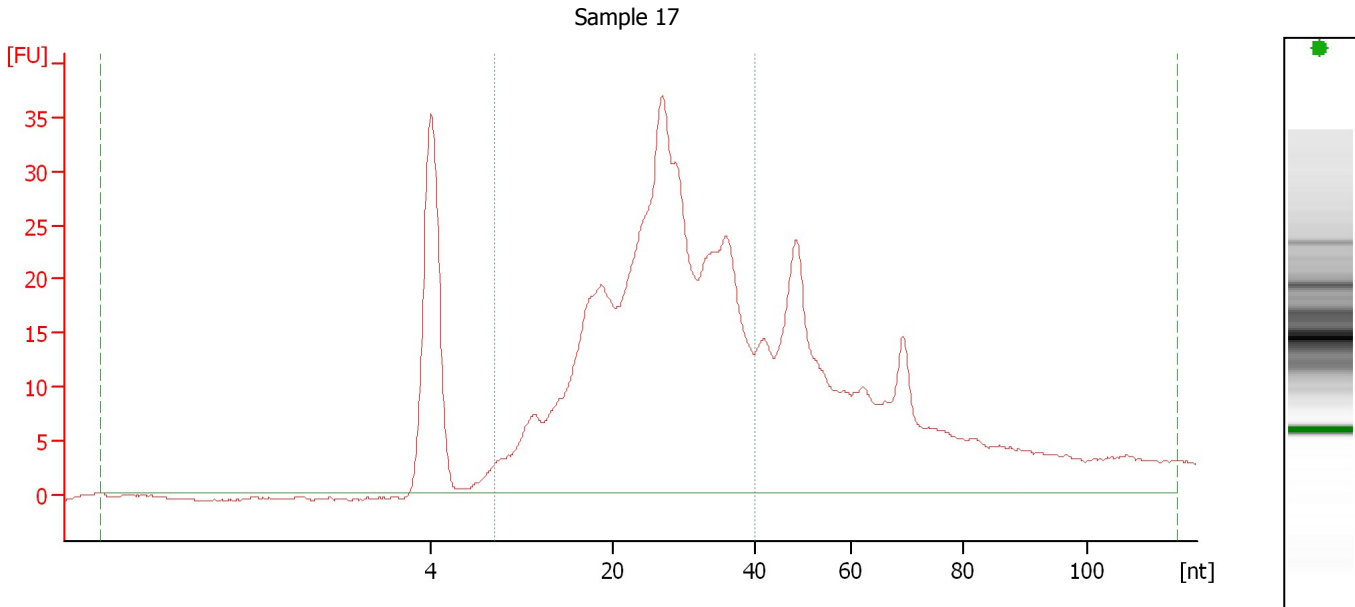
Region table for sample 5 : Sample 16

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|--|
| Small RNA | 0 | 124 | 47 | 69.2 | 3,478.4 | 100 | |
| miRNA | 10 | 40 | 26 | 30.3 | 2,451.4 | 70 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Sample 17

| | | | |
|----------------------------------|---------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 6,873.9 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 5,654.1 | Result Flagging Label: | 82 % miRNA; Concentration: 5654.10 pg/μl |
| miRNA / Small RNA Ratio [%]: | 82 | | |

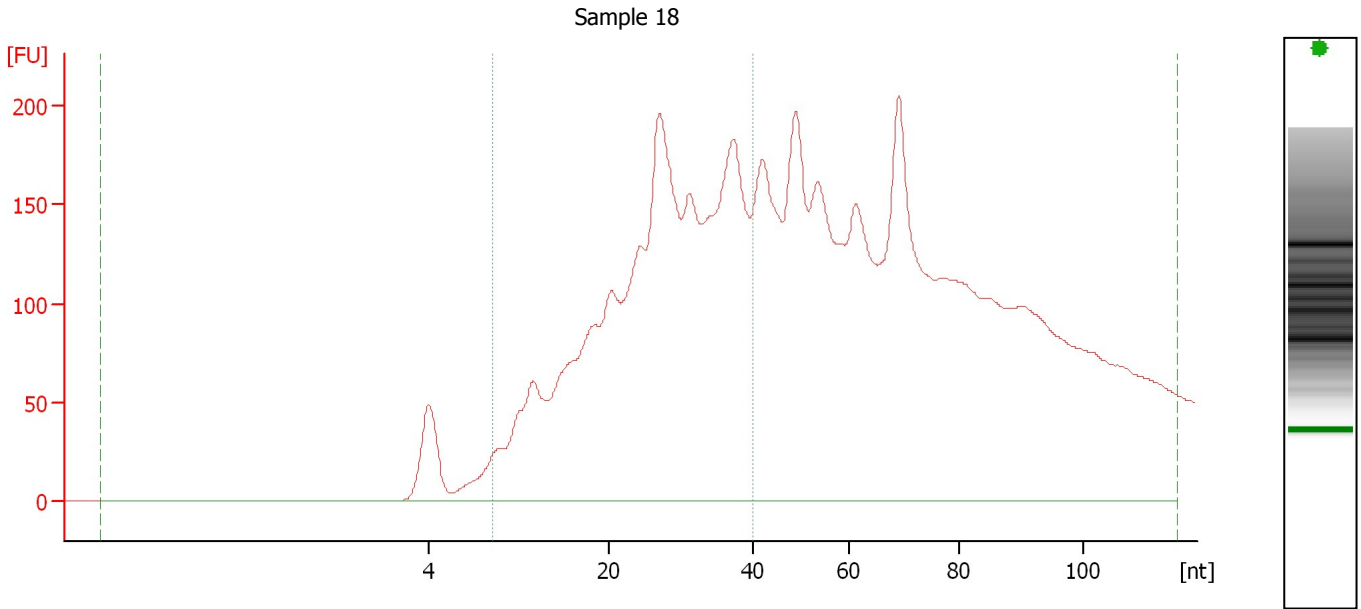
Region table for sample 6 : Sample 17

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 122 | 39 | 66.1 | 6,873.9 | 100 | |
| miRNA | 10 | 40 | 26 | 28.5 | 5,654.1 | 82 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Sample 18

| | | | |
|----------------------------------|----------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 35,803.4 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 23,239.5 | Result Flagging Label: | 65 % miRNA; Concentration: 23239.50 pg/μl |
| miRNA / Small RNA Ratio [%]: | 65 | | |

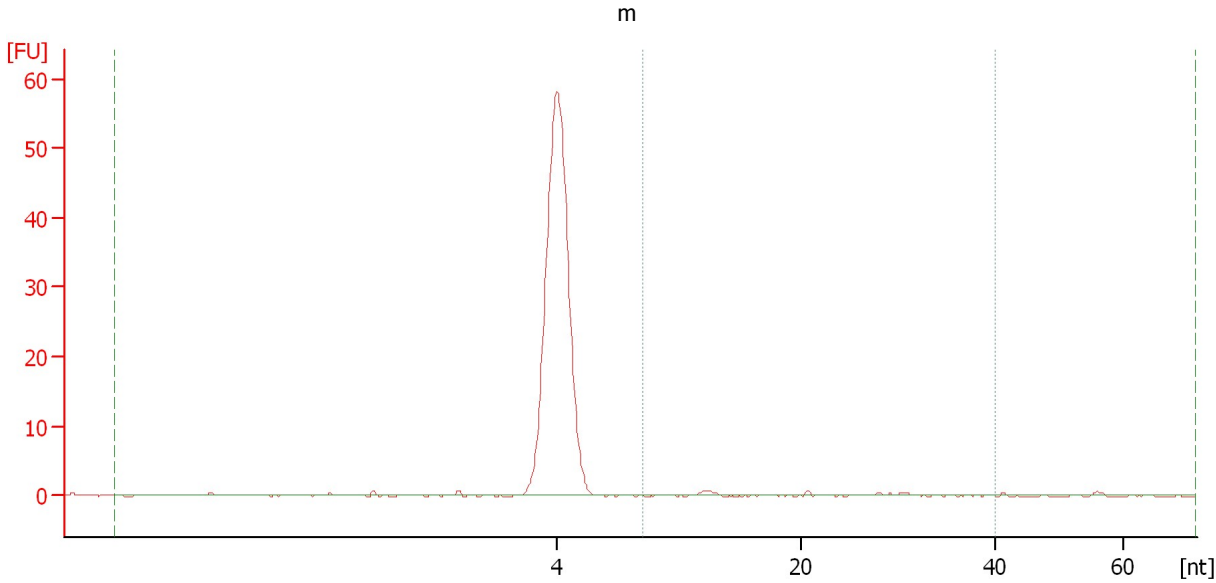
Region table for sample 7 : Sample 18

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 123 | 55 | 53.0 | 35,803.4 | 100 | |
| miRNA | 10 | 40 | 27 | 30.3 | 23,239.5 | 65 | |

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
 Modified: 11/25/2013 4:50:37 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : m

End Analysis Time Range [s] : 74.3

Overall Results for sample 8 : m

Small RNA Concentration [pg/μl]: 22.7
 miRNA Concentration [pg/μl]: 13.0
 miRNA / Small RNA Ratio [%]: 57

Result Flagging Color:
 Result Flagging Label: 57 % miRNA;
 Concentration: 13
 pg/μl

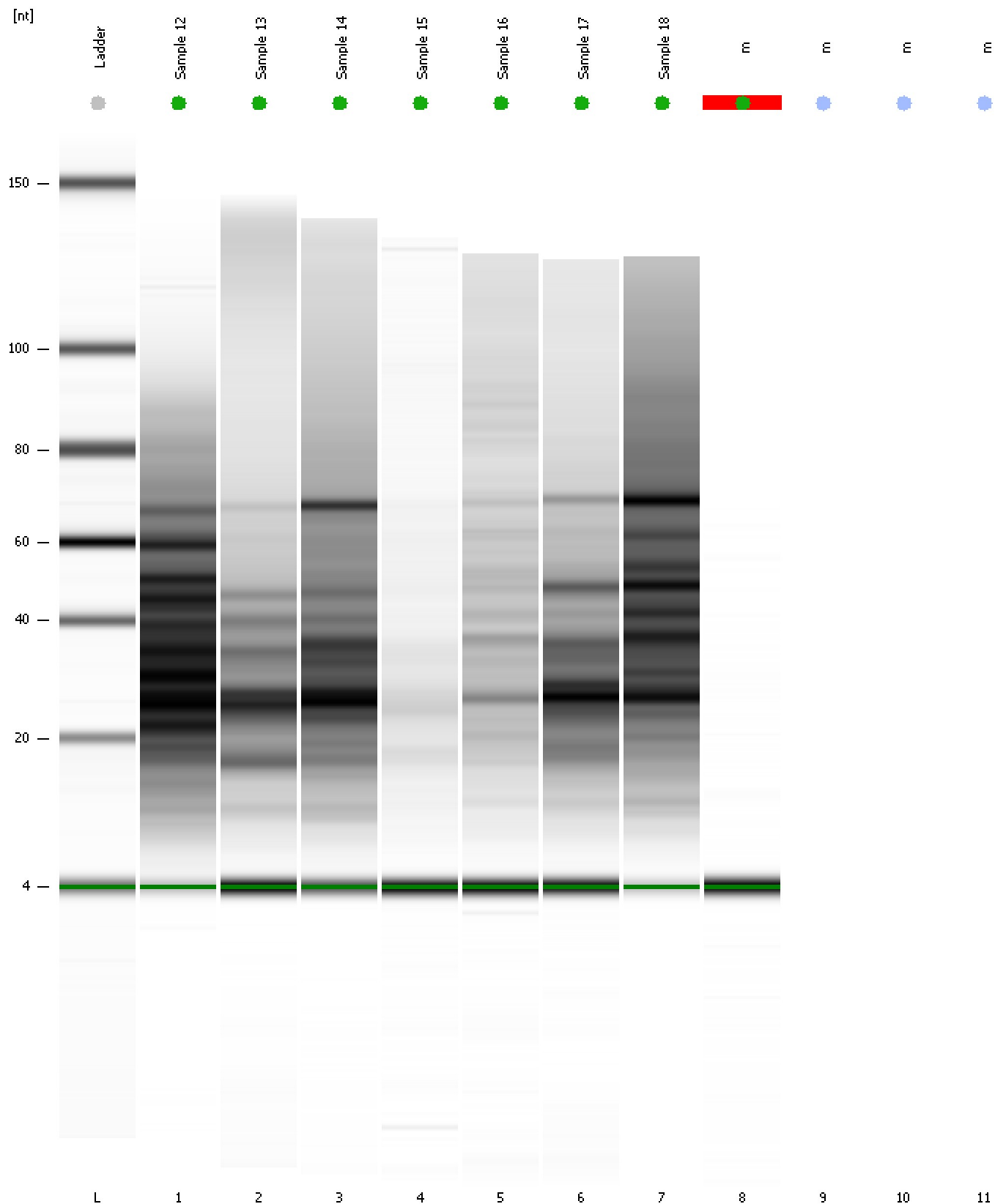
Region table for sample 8 : m

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|--|
| Small RNA | 0 | 70 | 4 | 94.3 | 22.7 | 100 | |
| miRNA | 10 | 40 | 21 | 34.5 | 13.0 | 57 | |

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
Modified: 11/25/2013 4:50:37 PM

Gel Image



Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2013-11-25\2013-11-25_003.xad

Created: 11/25/2013 4:25:32 PM
Modified: 11/25/2013 4:50:37 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.