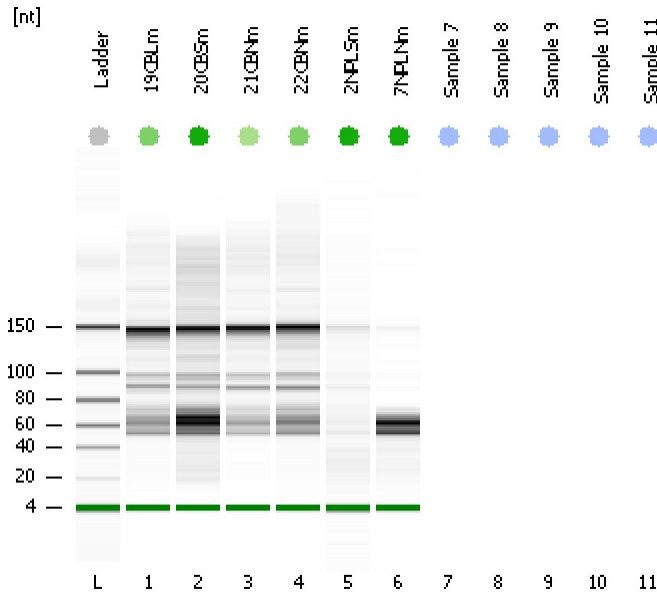


Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
Modified: 8/6/2019 12:45:21 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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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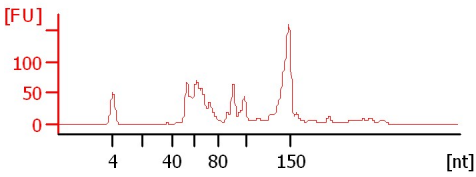
Chip Information:

Chip Lot #:

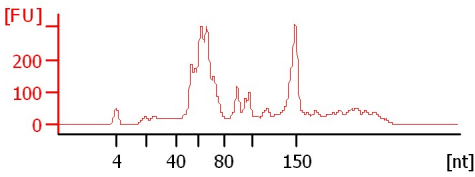
Reagent Kit Lot #:

Chip Comments:

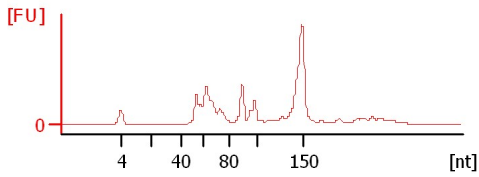
19CBLm
7 % miRNA; Concentration: 677.80 pg/µl



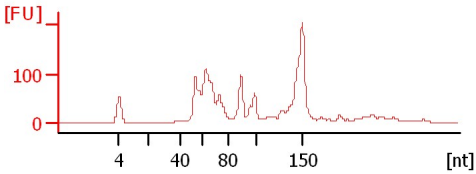
20CBSm
24 % miRNA; Concentration: 9490.50 pg/µl



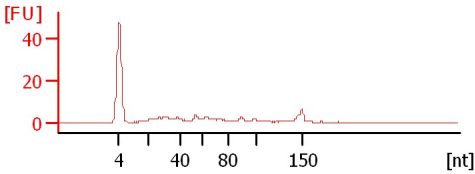
21CBNm
5 % miRNA; Concentration: 983.70 pg/µl



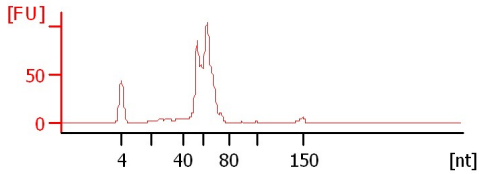
22CBNm
7 % miRNA; Concentration: 951.30 pg/µl



2NPLSm
66 % miRNA; Concentration: 949.90 pg/µl















7NPLNm
23 % miRNA; Concentration: 1679.40 pg/µl



Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|----------------|--------|--|--|
| 19CBLm | | ✓ | 7 % miRNA; Concentration: 677.80 pg/μl |  |
| 20CBSm | | ✓ | 24 % miRNA; Concentration: 9490.50 pg/μl |  |
| 21CBNm | | ✓ | 5 % miRNA; Concentration: 983.70 pg/μl |  |
| 22CBNm | | ✓ | 7 % miRNA; Concentration: 951.30 pg/μl |  |
| 2NPLSm | | ✓ | 66 % miRNA; Concentration: 949.90 pg/μl |  |
| 7NPLNm | | ✓ | 23 % miRNA; Concentration: 1679.40 pg/μl |  |
| Sample 7 | | | |  |
| Sample 8 | | | |  |
| Sample 9 | | | |  |
| Sample 10 | | | |  |
| Sample 11 | | | |  |
| Ladder | | ✓ | Number of Peaks: 6 |  |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
Modified: 8/6/2019 12:45:21 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

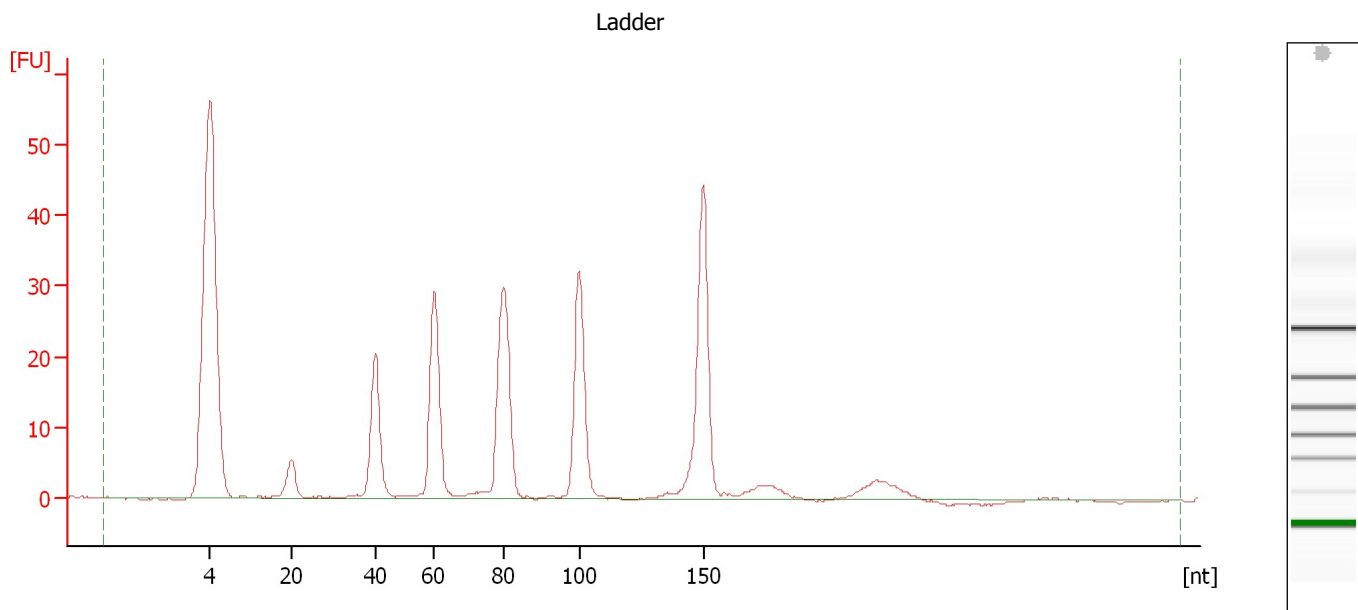
Ladder

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

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

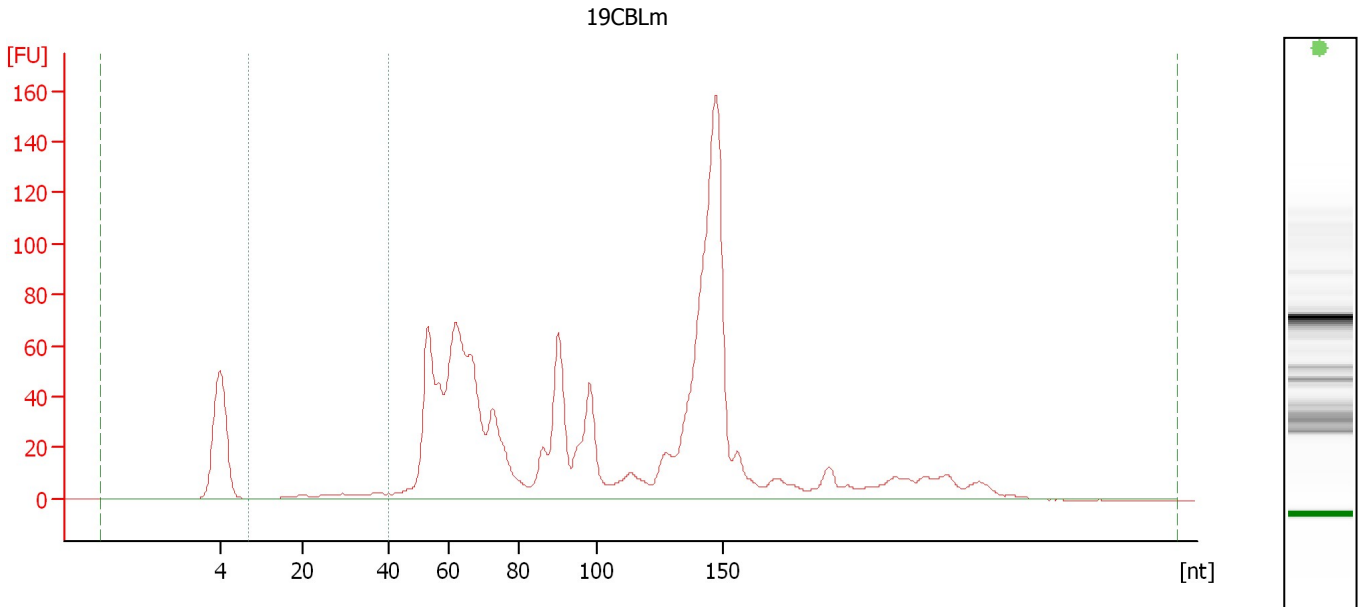
Result Flagging Label:

Number of Peaks: 6

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 19CBLm

| | | | |
|----------------------------------|----------|------------------------|---|
| Small RNA Concentration [pg/μl]: | 10,358.5 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 677.8 | Result Flagging Label: | 7 % miRNA; Concentration: 677.80 pg/μl |
| miRNA / Small RNA Ratio [%]: | 7 | | |

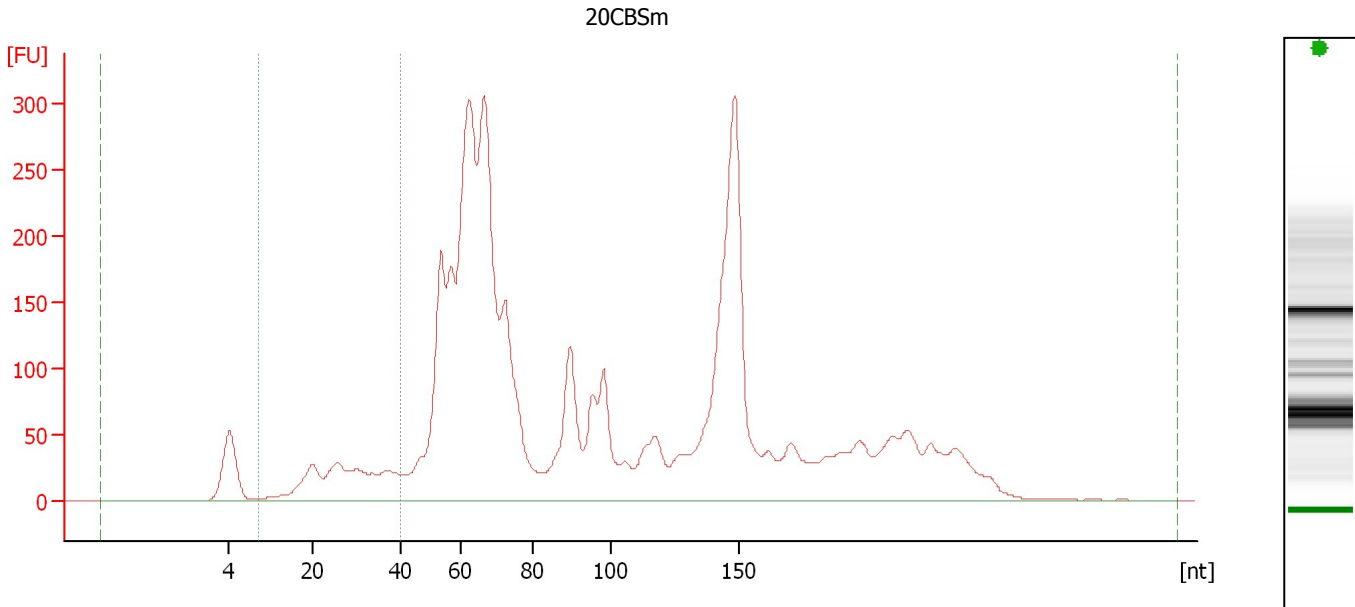
Region table for sample 1 : 19CBLm

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Col or |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 330 | 109 | 51.3 | 10,358.5 | 100 | |
| miRNA | 10 | 40 | 29 | 24.2 | 677.8 | 7 | |

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 20CBSm

| | | | |
|----------------------------------|----------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 39,661.4 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 9,490.5 | Result Flagging Label: | 24 % miRNA; Concentration: 9490.50 pg/μl |
| miRNA / Small RNA Ratio [%]: | 24 | | |

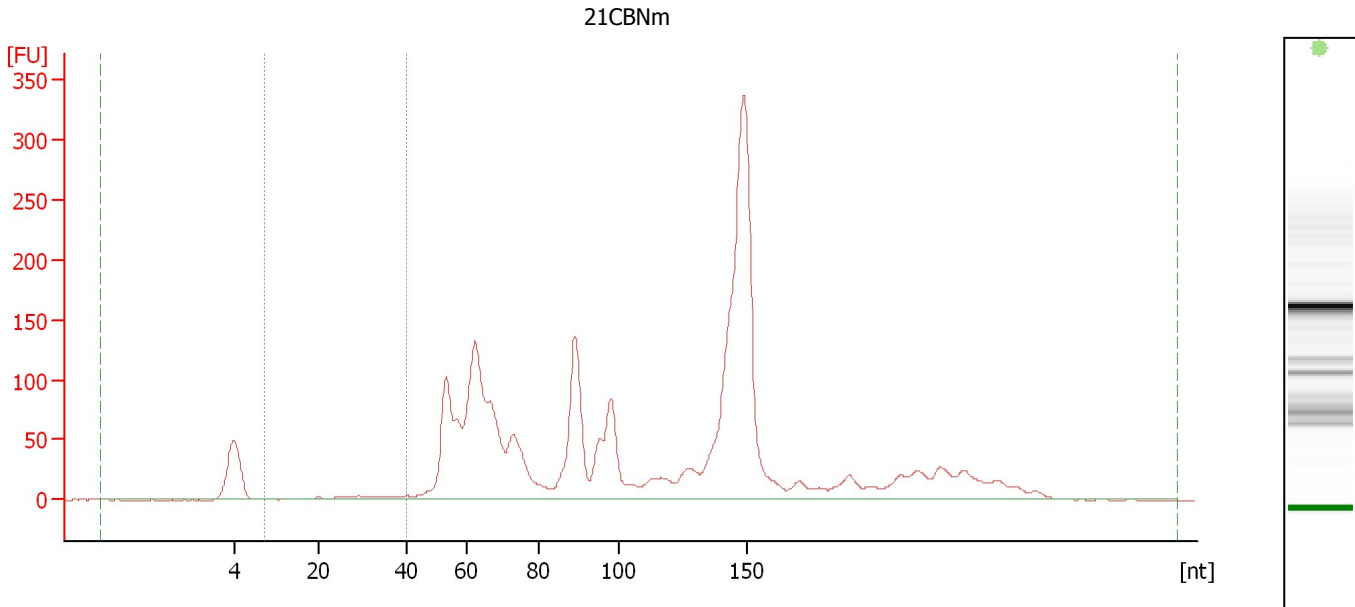
Region table for sample 2 : 20CBSm

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 322 | 108 | 55.6 | 39,661.4 | 100 | |
| miRNA | 10 | 40 | 27 | 26.3 | 9,490.5 | 24 | |

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 21CBNm

| | | | |
|----------------------------------|----------|------------------------|---|
| Small RNA Concentration [pg/μl]: | 18,568.3 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 983.7 | Result Flagging Label: | 5 % miRNA; Concentration: 983.70 pg/μl |
| miRNA / Small RNA Ratio [%]: | 5 | | |

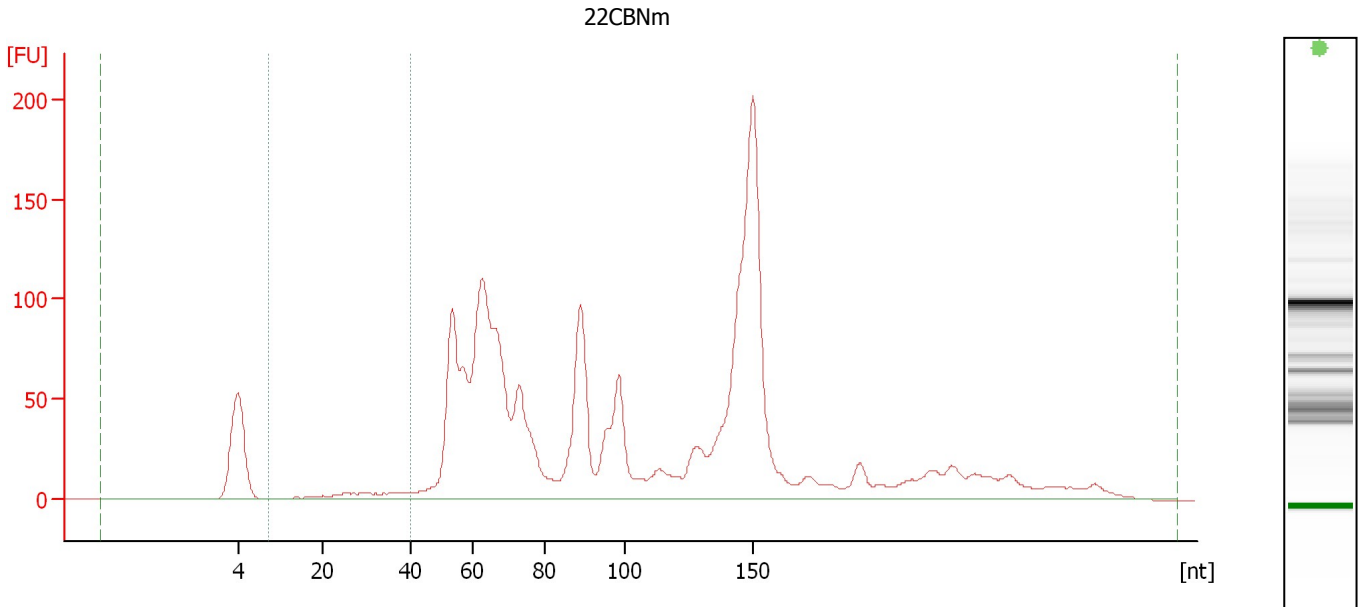
Region table for sample 3 : 21CBNm

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 318 | 120 | 47.7 | 18,568.3 | 100 | |
| miRNA | 10 | 40 | 30 | 22.2 | 983.7 | 5 | |

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 22CBNm

| | | | |
|----------------------------------|----------|------------------------|---|
| Small RNA Concentration [pg/μl]: | 13,992.9 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 951.3 | Result Flagging Label: | 7 % miRNA; Concentration: 951.30 pg/μl |
| miRNA / Small RNA Ratio [%]: | 7 | | |

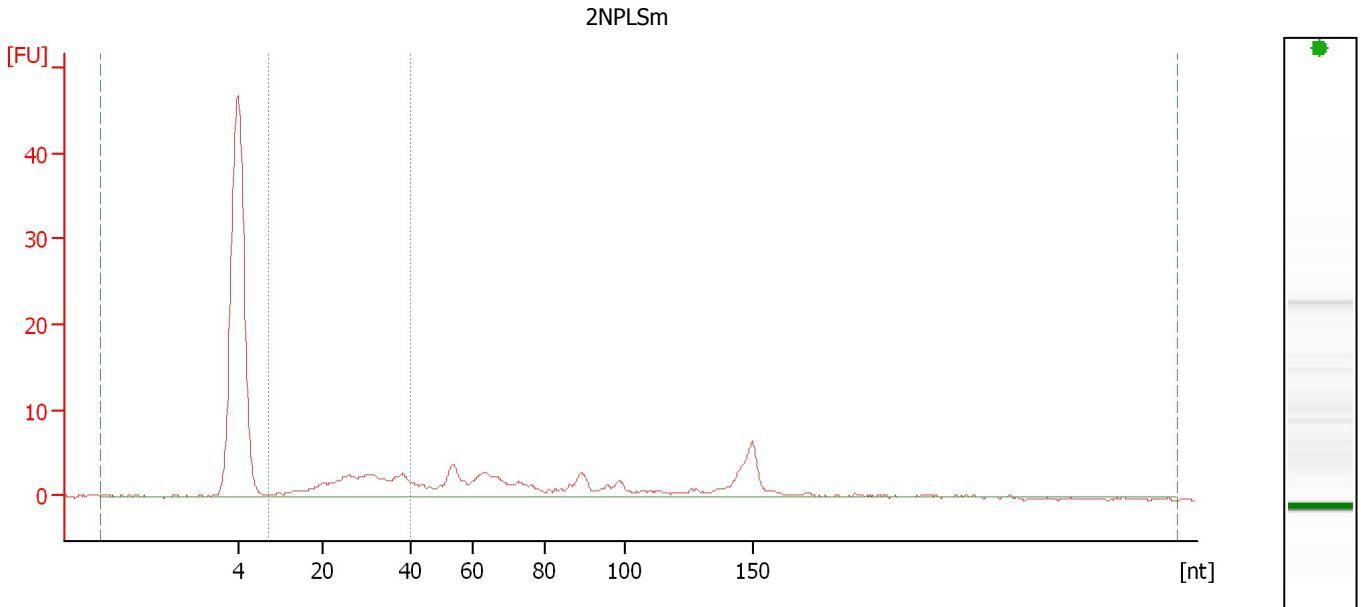
Region table for sample 4 : 22CBNm

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Col or |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 314 | 114 | 53.5 | 13,992.9 | 100 | |
| miRNA | 10 | 40 | 29 | 25.2 | 951.3 | 7 | |

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 2NPLSm

| | | | |
|----------------------------------|---------|------------------------|--|
| Small RNA Concentration [pg/μl]: | 1,429.0 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 949.9 | Result Flagging Label: | 66 % miRNA; Concentration: 949.90 pg/μl |
| miRNA / Small RNA Ratio [%]: | 66 | | |

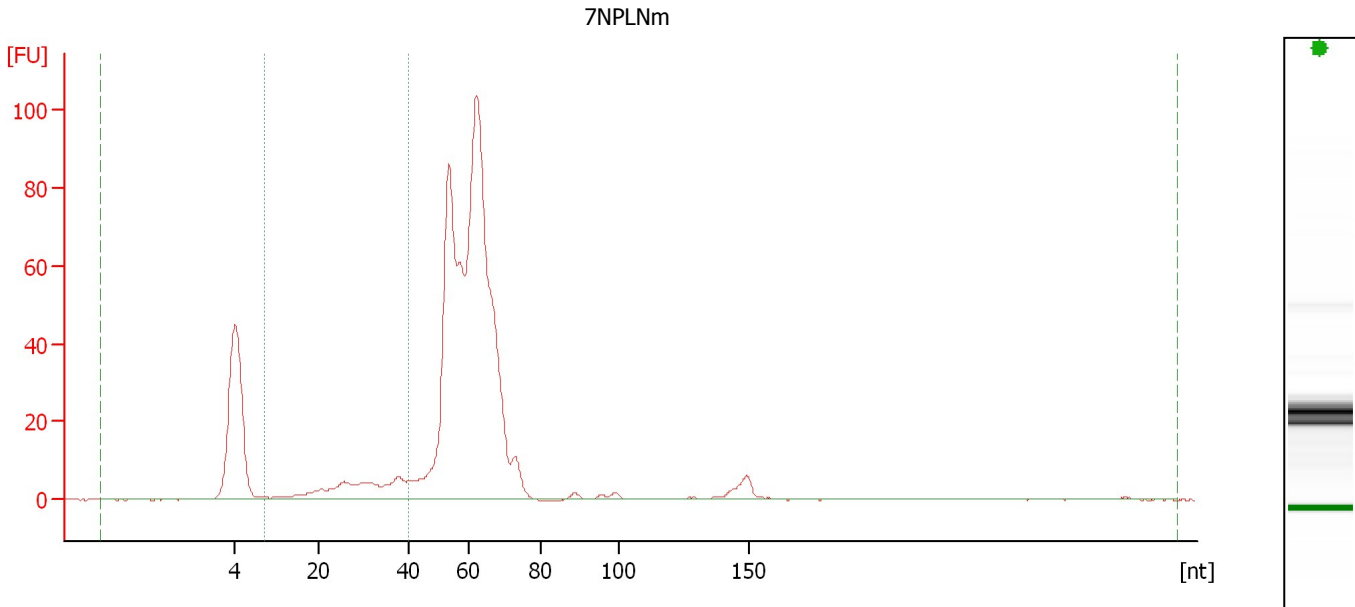
Region table for sample 5 : 2NPLSm

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|---|
| Small RNA | 0 | 314 | 40 | 100.0 | 1,429.0 | 100 | |
| miRNA | 10 | 40 | 28 | 24.7 | 949.9 | 66 | |

Assay Class: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 7NPLNm

| | | | |
|----------------------------------|---------|------------------------|---|
| Small RNA Concentration [pg/μl]: | 7,278.7 | Result Flagging Color: | |
| miRNA Concentration [pg/μl]: | 1,679.4 | Result Flagging Label: | 23 % miRNA; Concentration: 1679.40 pg/μl |
| miRNA / Small RNA Ratio [%]: | 23 | | |

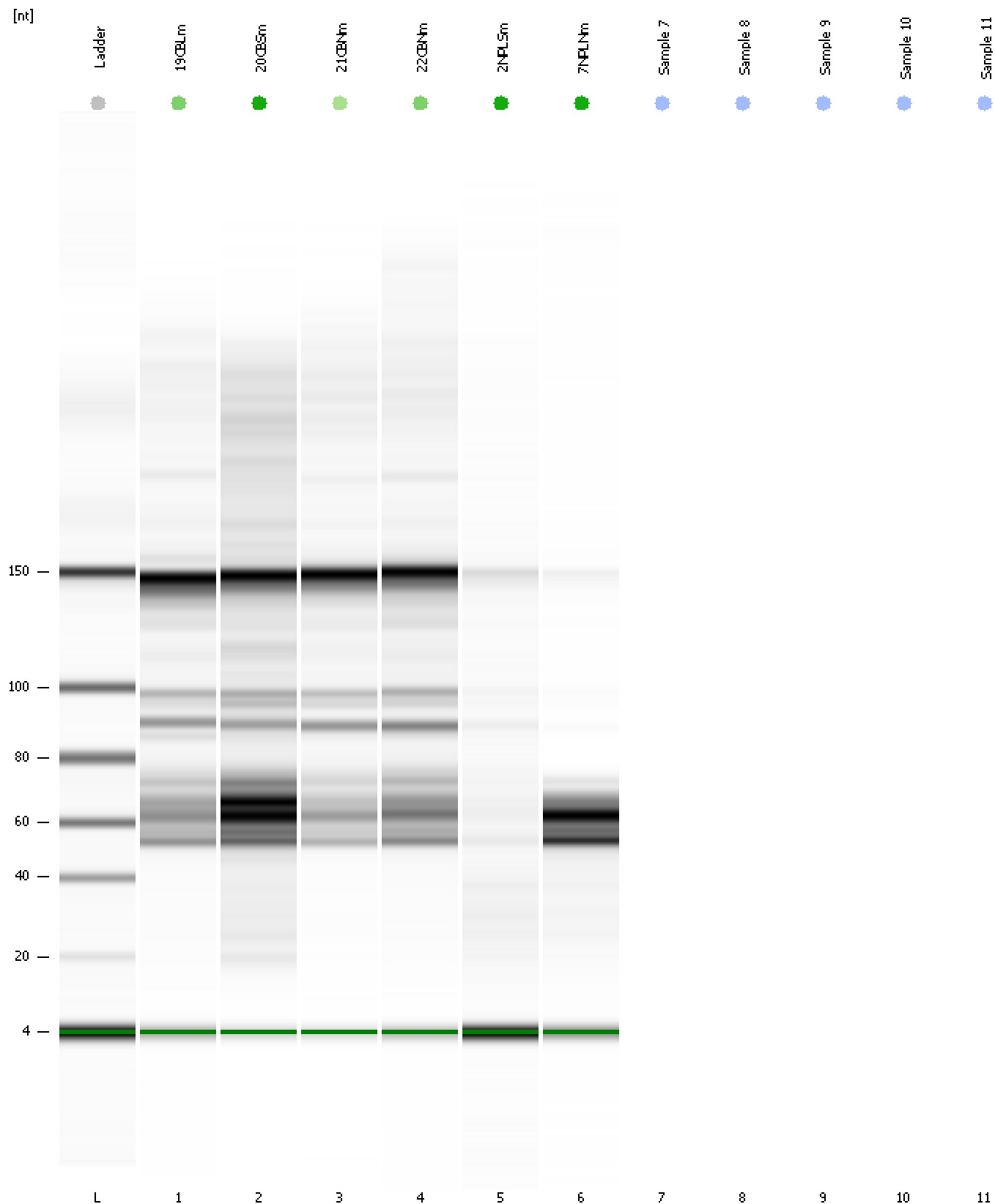
Region table for sample 6 : 7NPLNm

| Name | From [nt] | To [nt] | Average Size [nt] | Size distribution in CV [%] | Conc. [pg/μl] | % of Total | Color |
|-----------|-----------|---------|-------------------|-----------------------------|---------------|------------|--|
| Small RNA | 0 | 317 | 54 | 48.2 | 7,278.7 | 100 | |
| miRNA | 10 | 40 | 29 | 24.7 | 1,679.4 | 23 | |

Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
Modified: 8/6/2019 12:45:21 PM

Gel Image



Assay Class: Small RNA
Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
Modified: 8/6/2019 12:45:21 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

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: Small RNA
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad

Created: 8/6/2019 12:22:09 PM
 Modified: 8/6/2019 12:45:21 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|--|--------|------------|----------|--------------|----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 7) | | Instrument | Run | | 8/6/2019 12:44:32 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-08-06\2019-08-06_006.xad) | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938C | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE34903152 | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 8/6/2019 12:22:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |