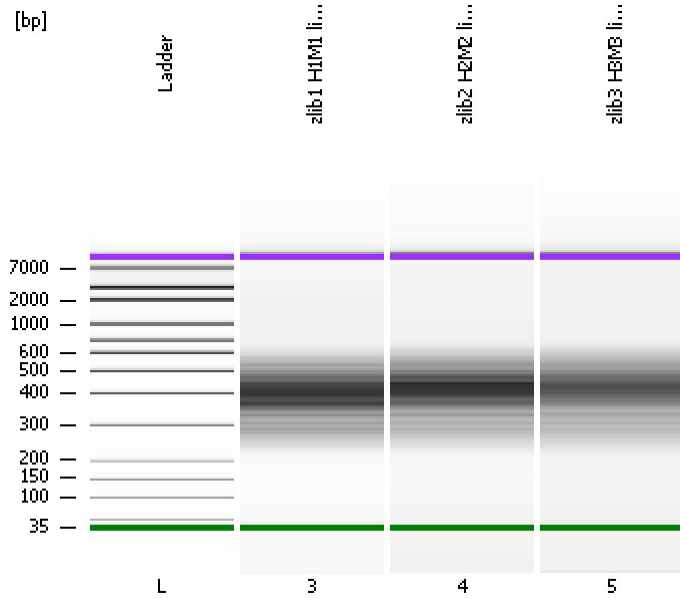


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
Modified: 9/28/2016 5:16:37 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\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

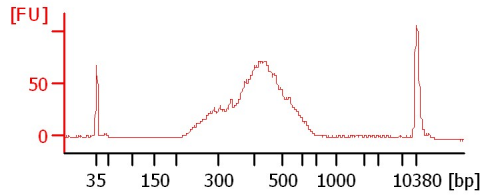
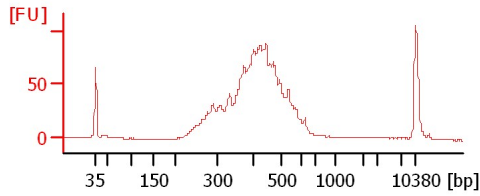
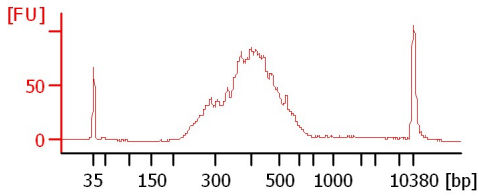
Chip Information:

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

zlib1 H1M1 library

zlib2 H2M2 library

zlib3 H3M3 library



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
Modified: 9/28/2016 5:16:37 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|--------------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| zlib1 H1M1 library | | <input type="checkbox"/> | ✓ | | | |
| zlib2 H2M2 library | | <input type="checkbox"/> | ✓ | | | |
| zlib3 H3M3 library | | <input type="checkbox"/> | ✓ | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
Modified: 9/28/2016 5:16:37 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

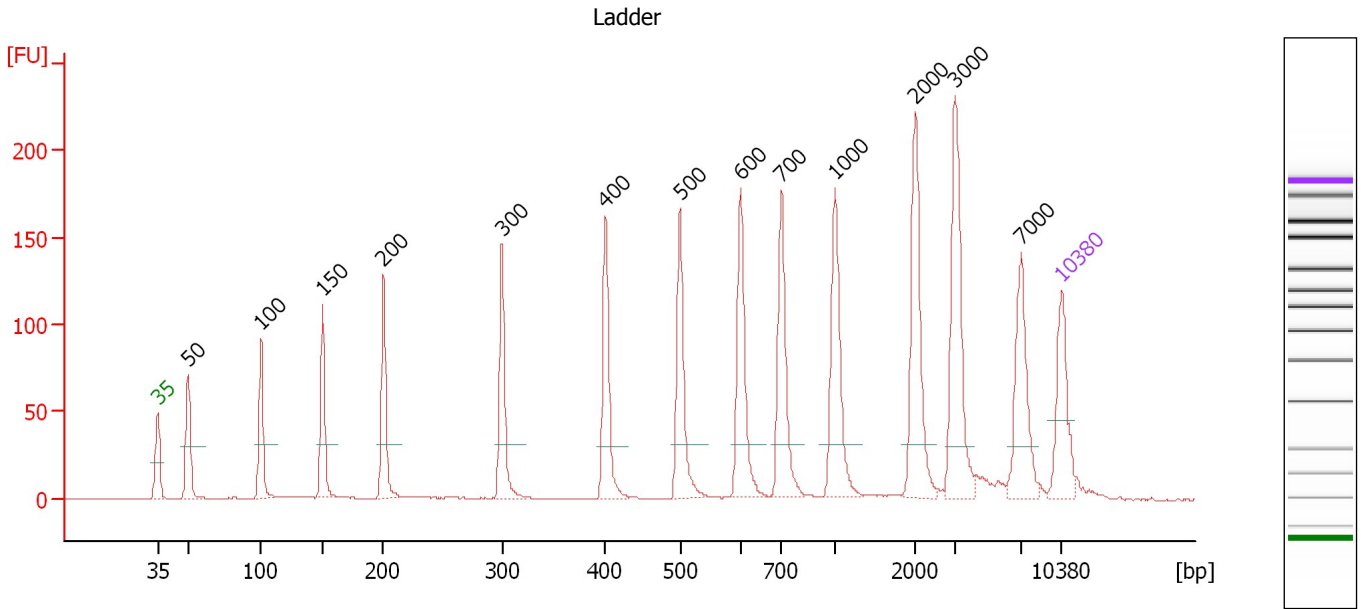
Ladder

| Ladder Peak | Size | Area |
|-------------|-------|------|
| 1 | 35 | 160 |
| 2 | 50 | 210 |
| 3 | 100 | 208 |
| 4 | 150 | 221 |
| 5 | 200 | 242 |
| 6 | 300 | 270 |
| 7 | 400 | 305 |
| 8 | 500 | 306 |
| 9 | 600 | 336 |
| 10 | 700 | 321 |
| 11 | 1000 | 366 |
| 12 | 2000 | 413 |
| 13 | 3000 | 411 |
| 14 | 7000 | 400 |
| 15 | 10380 | 214 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
 Modified: 9/28/2016 5:16:37 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

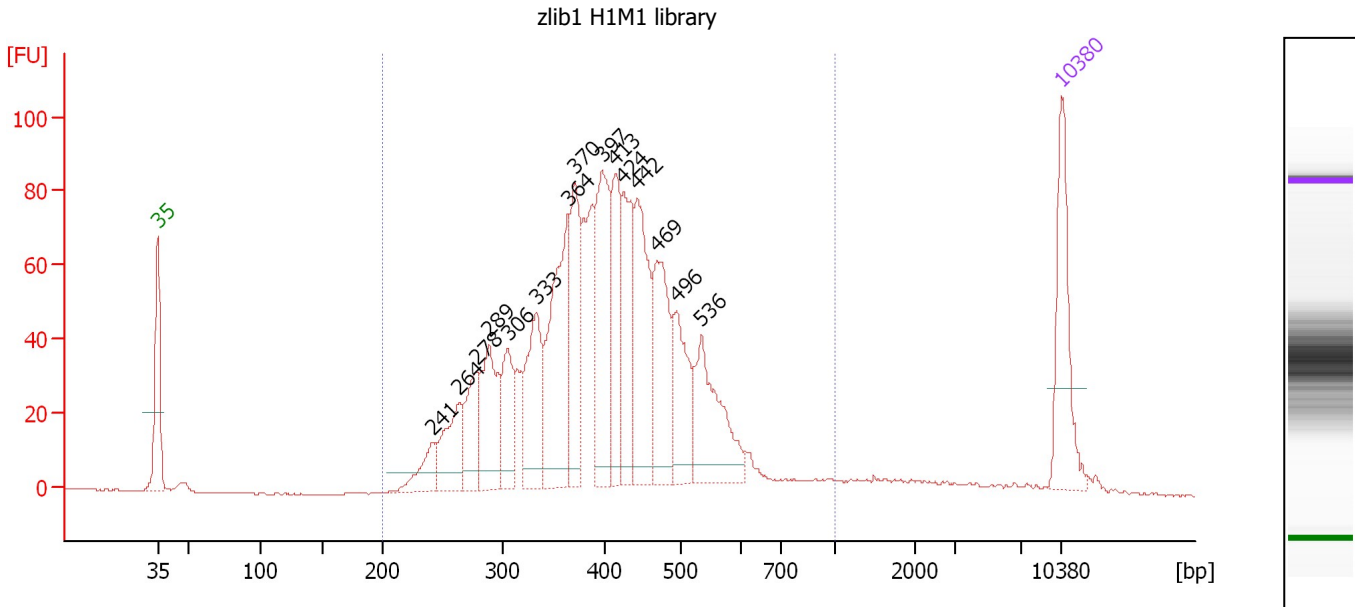
Peak table for Ladder

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 50 | 150.00 | 4,545.5 | Ladder Peak | 45.35 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 51.00 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.79 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.49 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 69.69 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 77.69 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 83.44 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 88.13 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 91.30 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 95.42 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.69 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.76 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.89 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
 Modified: 9/28/2016 5:16:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : zlib1 H1M1 library

Number of peaks found: 15 Corr. Area 1: 1,541.0
 Noise: 0.2

Peak table for sample 3 : zlib1 H1M1 library

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 241 | 36.84 | 231.9 | | 64.24 |
| 3 | 264 | 67.48 | 387.7 | | 66.35 |
| 4 | 278 | 63.54 | 346.1 | | 67.68 |
| 5 | 289 | 95.09 | 498.8 | | 68.66 |
| 6 | 306 | 64.12 | 317.9 | | 70.13 |
| 7 | 333 | 106.75 | 486.3 | | 72.30 |
| 8 | 364 | 170.45 | 709.6 | | 74.80 |
| 9 | 370 | 100.39 | 411.0 | | 75.30 |
| 10 | 397 | 138.97 | 531.0 | | 77.41 |
| 11 | 413 | 93.06 | 341.3 | | 78.44 |
| 12 | 424 | 97.63 | 348.7 | | 79.08 |
| 13 | 442 | 129.90 | 445.1 | | 80.11 |
| 14 | 469 | 110.94 | 358.6 | | 81.64 |
| 15 | 496 | 82.04 | 250.6 | | 83.21 |
| 16 | 536 | 106.37 | 300.7 | | 85.13 |
| 17 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

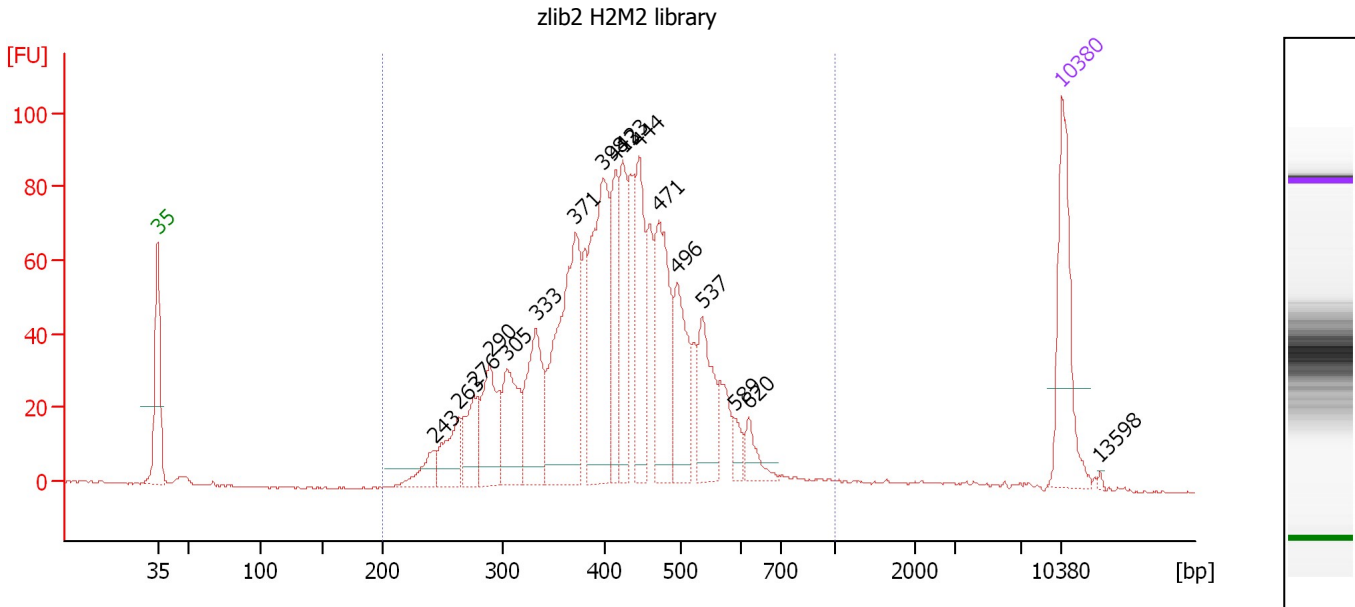
Region table for sample 3 : zlib1 H1M1 library

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 200 | 1,000 | 410 | 1,541.0 | 6,866.4 | 1,712.90 | 95 | 24.9 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
 Modified: 9/28/2016 5:16:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : zlib2 H2M2 library

Number of peaks found: 17 Corr. Area 1: 1,459.6
 Noise: 0.3

Peak table for sample 4 : zlib2 H2M2 library

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 243 | 27.65 | 172.7 | | 64.41 |
| 3 | 263 | 46.57 | 267.9 | | 66.32 |
| 4 | 276 | 47.36 | 260.1 | | 67.47 |
| 5 | 290 | 74.59 | 390.3 | | 68.73 |
| 6 | 305 | 73.33 | 364.3 | | 70.09 |
| 7 | 333 | 93.47 | 425.8 | | 72.30 |
| 8 | 371 | 192.01 | 784.3 | | 75.36 |
| 9 | 398 | 170.45 | 649.0 | | 77.52 |
| 10 | 413 | 74.93 | 275.0 | | 78.43 |
| 11 | 423 | 76.46 | 273.7 | | 79.03 |
| 12 | 444 | 92.43 | 315.2 | | 80.24 |
| 13 | 471 | 114.34 | 367.5 | | 81.79 |
| 14 | 496 | 81.00 | 247.5 | | 83.20 |
| 15 | 537 | 68.22 | 192.6 | | 85.16 |
| 16 | 589 | 13.00 | 33.4 | | 87.62 |
| 17 | 620 | 18.83 | 46.0 | | 88.78 |
| 18 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 19 | 13,598 | 0.00 | 0.0 | | 115.96 |

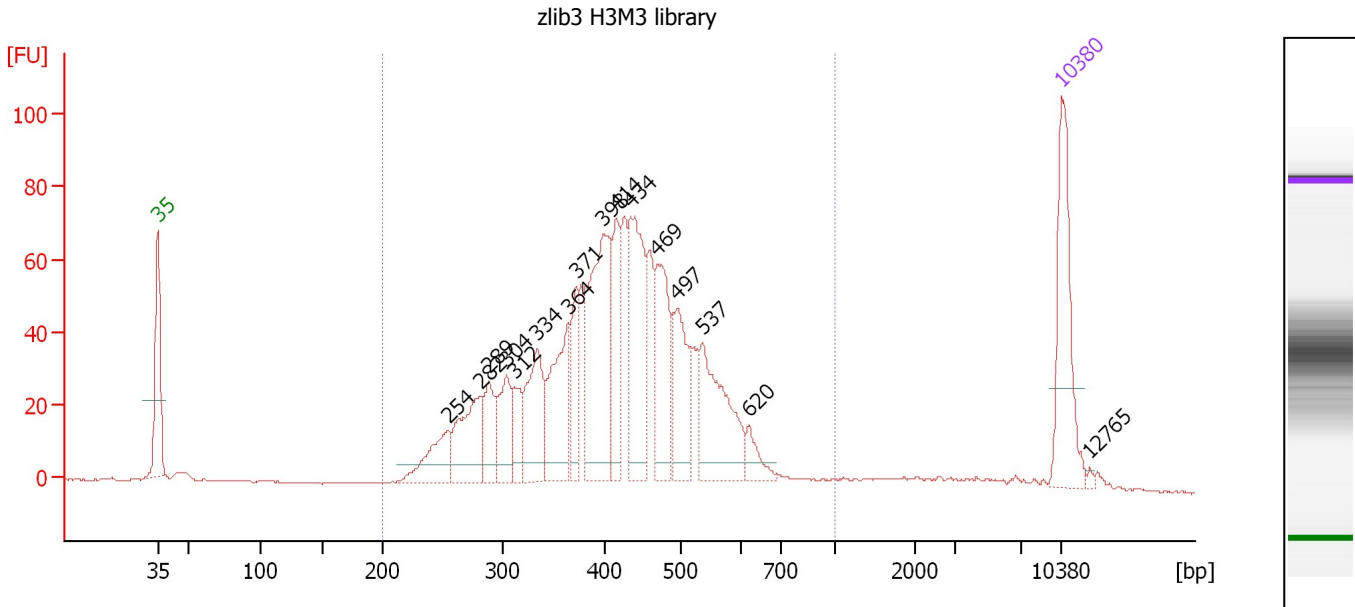
Region table for sample 4 : zlib2 H2M2 library

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 200 | 1,000 | 422 | 1,459.6 | 5,914.1 | 1,525.37 | 96 | 23.8 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
 Modified: 9/28/2016 5:16:37 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : zlib3 H3M3 library

Number of peaks found: 16 Corr. Area 1: 1,311.6
 Noise: 0.2

Peak table for sample 5 : zlib3 H3M3 library

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 254 | 52.17 | 310.8 | | 65.48 |
| 3 | 282 | 80.50 | 433.3 | | 67.99 |
| 4 | 289 | 39.79 | 208.8 | | 68.65 |
| 5 | 304 | 52.17 | 259.8 | | 70.03 |
| 6 | 312 | 30.21 | 146.7 | | 70.64 |
| 7 | 334 | 77.89 | 353.7 | | 72.38 |
| 8 | 364 | 86.94 | 362.2 | | 74.78 |
| 9 | 371 | 47.83 | 195.2 | | 75.39 |
| 10 | 398 | 159.62 | 607.4 | | 77.54 |
| 11 | 414 | 58.00 | 212.1 | | 78.51 |
| 12 | 434 | 116.94 | 408.4 | | 79.64 |
| 13 | 469 | 88.81 | 286.7 | | 81.68 |
| 14 | 497 | 73.58 | 224.3 | | 83.26 |
| 15 | 537 | 101.59 | 286.9 | | 85.15 |
| 16 | 620 | 16.93 | 41.3 | | 88.78 |
| 17 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 18 | 12,765 | 0.00 | 0.0 | | 115.20 |

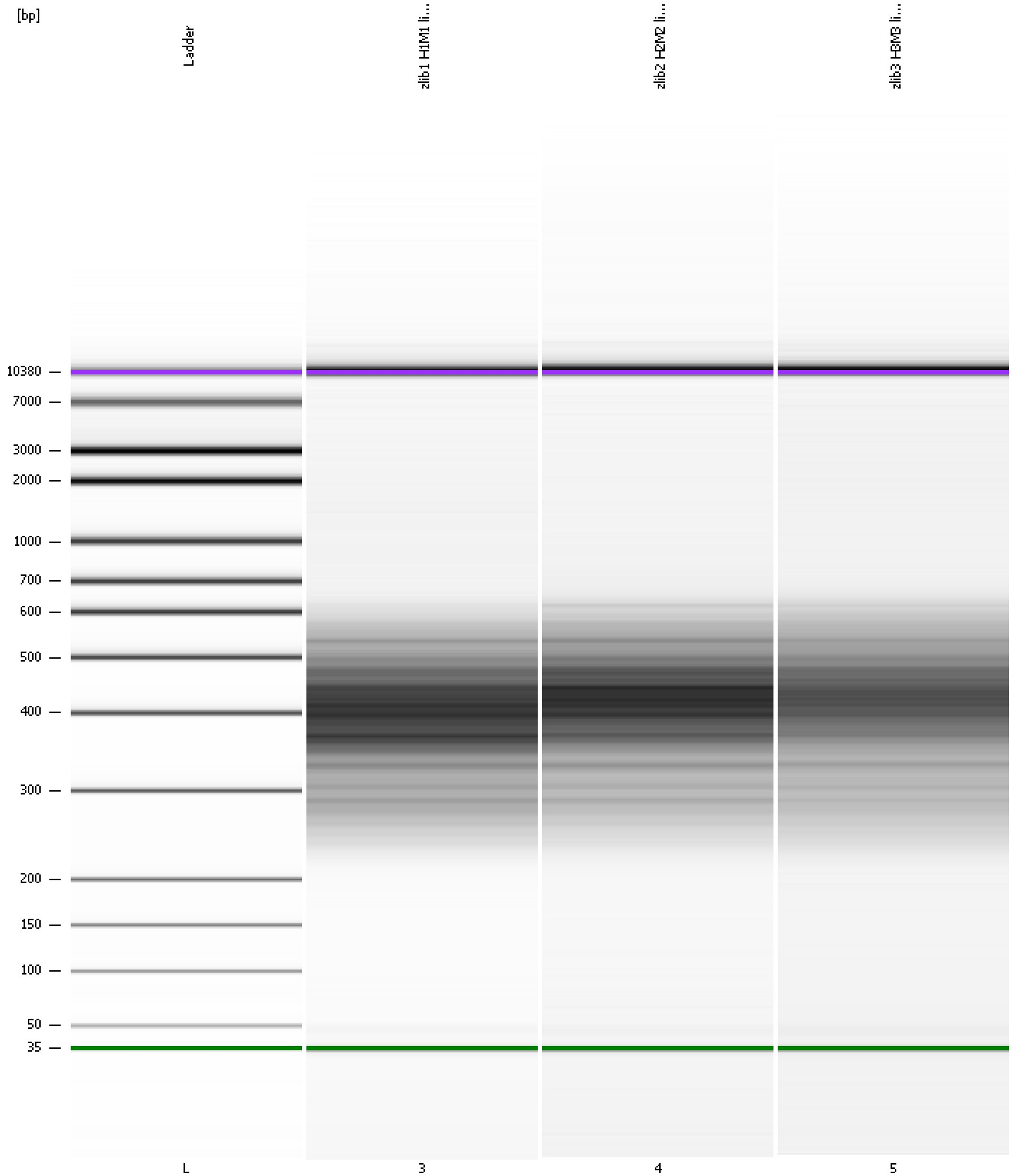
Region table for sample 5 : zlib3 H3M3 library

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 200 | 1,000 | 423 | 1,311.6 | 5,225.0 | 1,336.39 | 92 | 25.1 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
Modified: 9/28/2016 5:16:37 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...00 expert\data\2016-09-28\2016-09-28_002_ZLib_Libraries.xad

Created: 9/28/2016 3:21:05 PM
 Modified: 9/28/2016 5:16:37 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 | | 9/28/2016 4:02:24 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\2016-09-28\2016-09-28_002.xad) | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 9/28/2016 3:21:10 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |