Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

## Electrophoresis File Run Summary

Instrument Information:

| | | | |
|---|---|---|---|
| Instrument Name: | DE13701086 | Firmware: | C.01.069 |
| Serial#: | DE13701086 | Type: | G2938B |

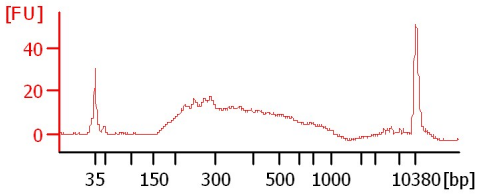
Assay Information:

| | |
|---|---|
| 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 |

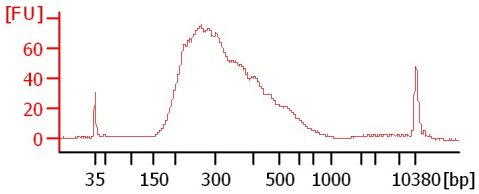
Chip Information:

| | |
|---|---|
| Chip Lot #: | |
| Reagent Kit Lot #: | |
| Chip Comments: | |

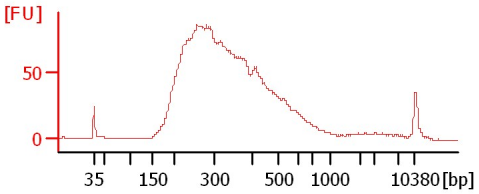
**H822P Smith RRBS Library Pool (1:2)**



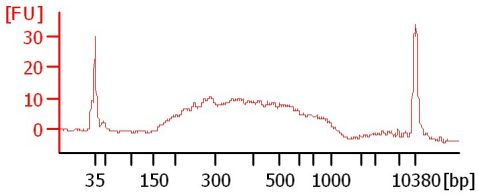

**H823P_Mengeling**



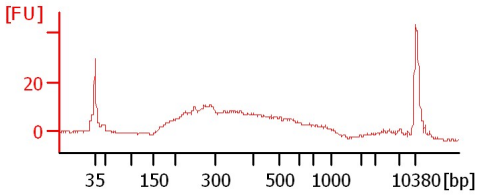

**H803P_Shah**



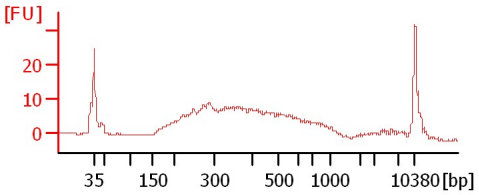

**17: RRBS lib**




**18: RRBS Lib**




**19: RRBS lib**



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electrophoresis File Run Summary (Chip Summary)**

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|---|---|---|---|---|---|---|
| H822P Smith RRBS Library Pool (1:2) | | ☐ | ✔ | | | |
| H823P_Mengeling | | ☐ | ✔ | | | |
| H803P_Shah | | ☐ | ✔ | | | |
| 17: RRBS lib | | ☐ | ✔ | | | |
| 18: RRBS Lib | | ☐ | ✔ | | | |
| 19: RRBS lib | | ☐ | ✔ | | | |
| sample 7 | | ☐ | | | | |
| sample 8 | | ☐ | | | | |
| sample 9 | | ☐ | | | | |
| sample 10 | | ☐ | | | | |
| sample 11 | | ☐ | | | | |
| Ladder | | ☐ | ✔ | | | |

**Chip Lot #** **Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 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

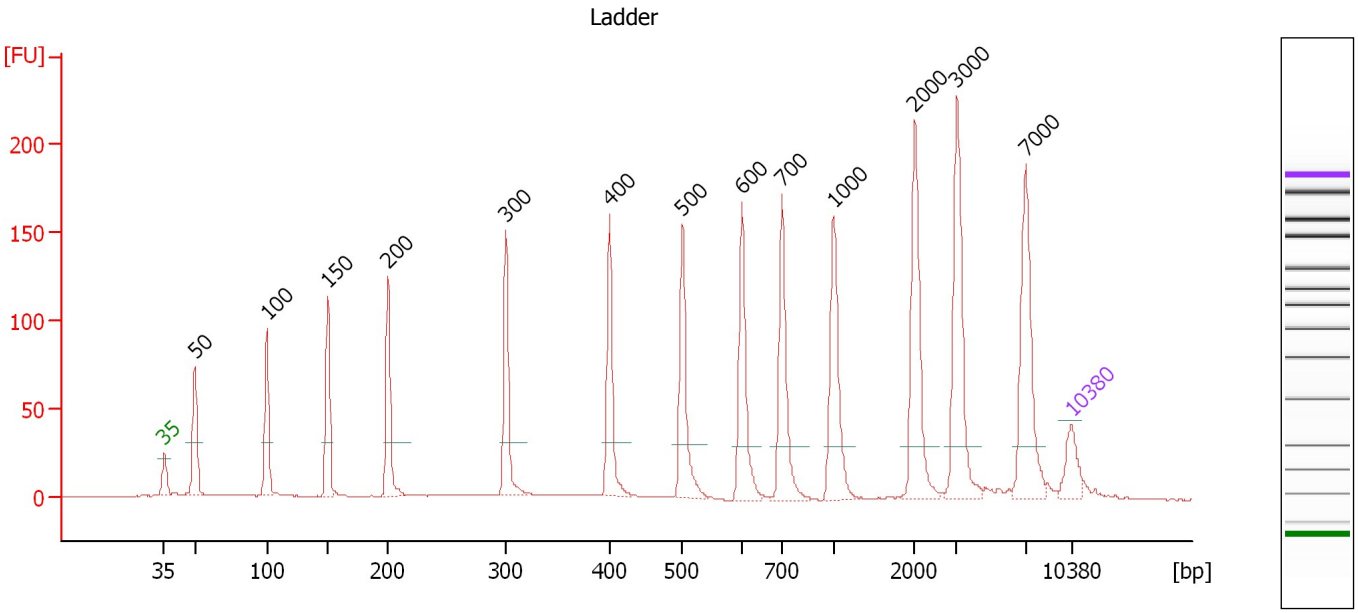
### Ladder

| 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:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

## Electropherogram Summary




## Overall Results for Ladder

Noise: 0.1

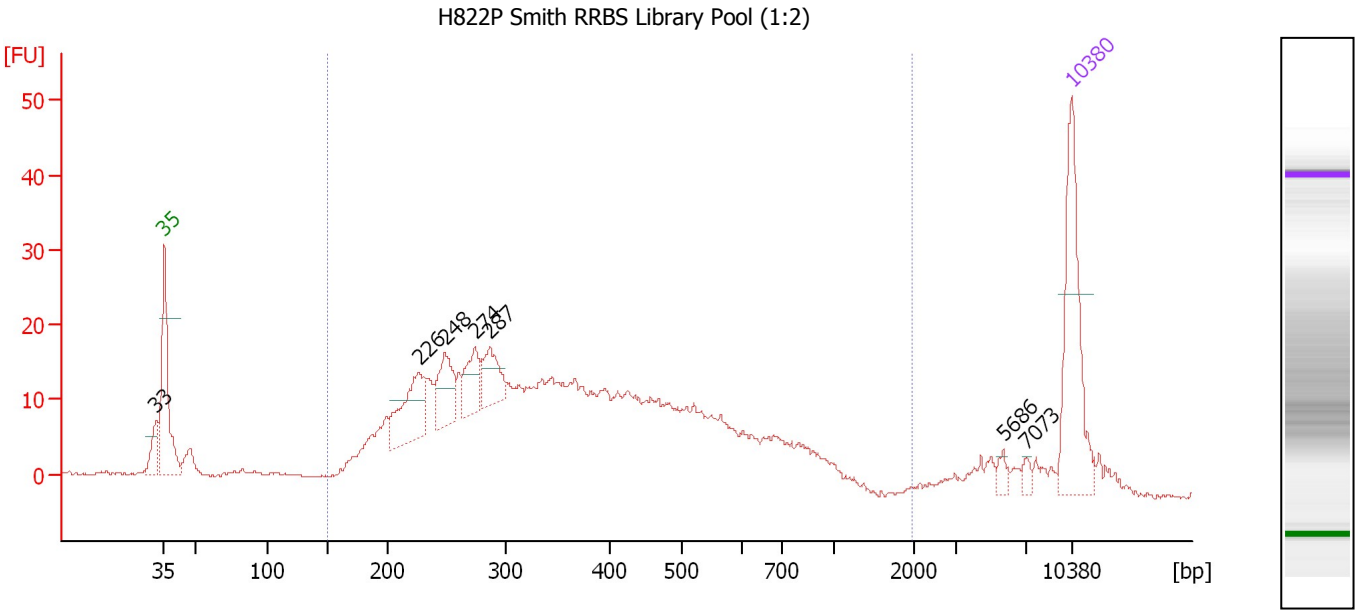
## Peak table for Ladder

| 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 | 50.94 |
| 4 | | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.64 |
| 5 | | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.29 |
| 6 | | 300 | 150.00 | 757.6 | Ladder Peak | 69.36 |
| 7 | | 400 | 150.00 | 568.2 | Ladder Peak | 77.34 |
| 8 | | 500 | 150.00 | 454.5 | Ladder Peak | 82.98 |
| 9 | | 600 | 150.00 | 378.8 | Ladder Peak | 87.58 |
| 10 | | 700 | 150.00 | 324.7 | Ladder Peak | 90.68 |
| 11 | | 1,000 | 150.00 | 227.3 | Ladder Peak | 94.63 |
| 12 | | 2,000 | 150.00 | 113.6 | Ladder Peak | 100.93 |
| 13 | | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.17 |
| 14 | | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.48 |
| 15 | | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electropherogram Summary Continued ...**




**Overall Results for sample 1 : H822P Smith RRBS Library Pool (1:2)**

| | | | |
|---|---|---|---|
| Number of peaks found: | 7 | Corr. Area 1: | 551.4 |
| Noise: | 0.3 | | |

**Peak table for sample 1 : H822P Smith RRBS Library Pool (1:2)**

| Peak | Size [bp] | Conc. [pg/µl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|---|---|---|---|---|---|
| 1 | 33 | 0.00 | 0.0 | | 42.38 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 226 | 64.57 | 433.2 | | 62.63 |
| 4 | 248 | 42.57 | 260.1 | | 64.64 |
| 5 | 274 | 32.60 | 180.3 | | 66.99 |
| 6 | 287 | 33.27 | 175.9 | | 68.14 |
| 7 | 5,686 | 5.69 | 1.5 | | 107.73 |
| 8 | 7,073 | 4.39 | 0.9 | | 109.55 |
| 9 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

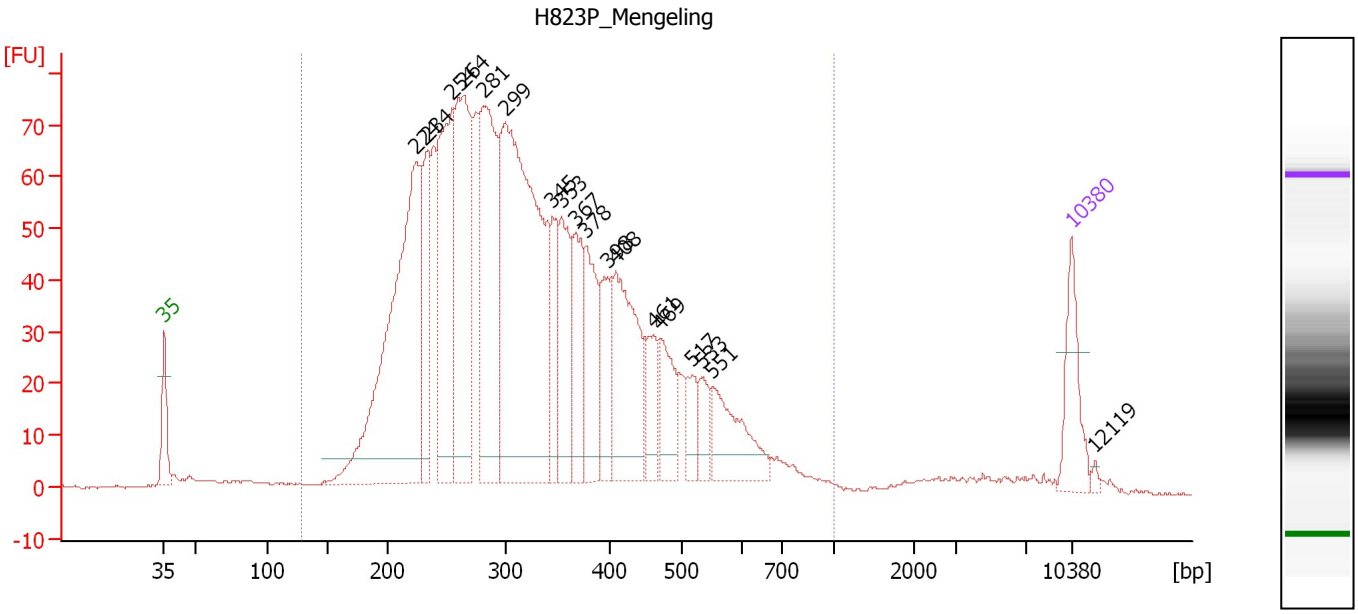
**Region table for sample 1 : H822P Smith RRBS Library Pool (1:2)**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Color [pg/µl] | % of Total | Size distribution in CV [%] |
|---|---|---|---|---|---|---|---|
| 150 | 1,962 | 391 | 551.4 | 5,153.4 | 1,065.66 | 90 | 43.8 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electropherogram Summary Continued ...**




**Overall Results for sample 2 : H823P_Mengeling**

| | | | |
|---|---|---|---|
| Number of peaks found: | 18 | Corr. Area 1: | 2,006.5 |
| Noise: | 0.2 | | |

**Peak table for sample 2 : H823P_Mengeling**

| 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 | 224 | 734.42 | 4,971.9 | | 62.45 |
| 3 | 234 | 182.73 | 1,185.6 | | 63.33 |
| 4 | 254 | 380.08 | 2,266.7 | | 65.19 |
| 5 | 264 | 392.89 | 2,256.7 | | 66.07 |
| 6 | 281 | 401.52 | 2,168.6 | | 67.59 |
| 7 | 299 | 841.02 | 4,255.5 | | 69.31 |
| 8 | 345 | 103.62 | 455.4 | | 72.93 |
| 9 | 353 | 159.76 | 685.1 | | 73.62 |
| 10 | 367 | 126.33 | 521.8 | | 74.69 |
| 11 | 378 | 147.03 | 589.5 | | 75.58 |
| 12 | 398 | 93.06 | 354.7 | | 77.14 |
| 13 | 408 | 245.81 | 913.4 | | 77.78 |
| 14 | 461 | 73.63 | 242.1 | | 80.77 |
| 15 | 469 | 99.10 | 320.4 | | 81.21 |
| 16 | 517 | 44.91 | 131.6 | | 83.76 |
| 17 | 533 | 42.36 | 120.4 | | 84.49 |
| 18 | 551 | 119.96 | 329.9 | | 85.32 |
| 19 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 20 | 12,119 | 0.00 | 0.0 | | 114.81 |

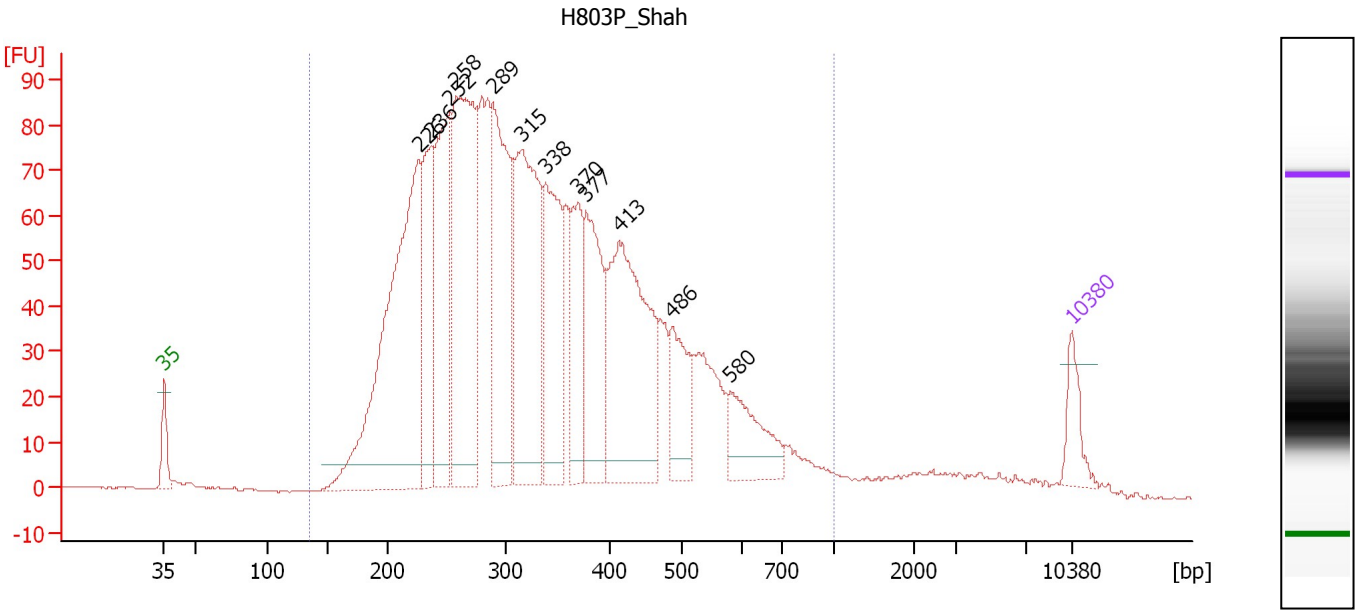
**Region table for sample 2 : H823P_Mengeling**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/µl] | % of Total | Size distribution in CV [%] |
|---|---|---|---|---|---|---|---|
| 128 | 1,000 | 337 | 2,006.5 | 24,881.7 | 4,815.76 | 95 | 34.5 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electropherogram Summary Continued ...**




**Overall Results for sample 3 : H803P_Shah**

| | | | |
|---|---|---|---|
| Number of peaks found: | 12 | Corr. Area 1: | 2,455.6 |
| Noise: | 0.2 | | |

**Peak table for sample 3 : H803P_Shah**

| 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 | 226 | 1,357.22 | 9,109.0 | | 62.62 |
| 3 | 236 | 378.21 | 2,426.5 | | 63.57 |
| 4 | 252 | 569.15 | 3,421.3 | | 65.01 |
| 5 | 258 | 989.20 | 5,819.8 | | 65.51 |
| 6 | 289 | 650.66 | 3,414.0 | | 68.34 |
| 7 | 315 | 786.96 | 3,789.9 | | 70.52 |
| 8 | 338 | 464.04 | 2,078.6 | | 72.41 |
| 9 | 370 | 277.56 | 1,136.7 | | 74.94 |
| 10 | 377 | 397.82 | 1,596.9 | | 75.54 |
| 11 | 413 | 728.57 | 2,672.9 | | 78.07 |
| 12 | 486 | 210.03 | 654.6 | | 82.20 |
| 13 | 580 | 196.46 | 513.1 | | 86.67 |
| 14 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

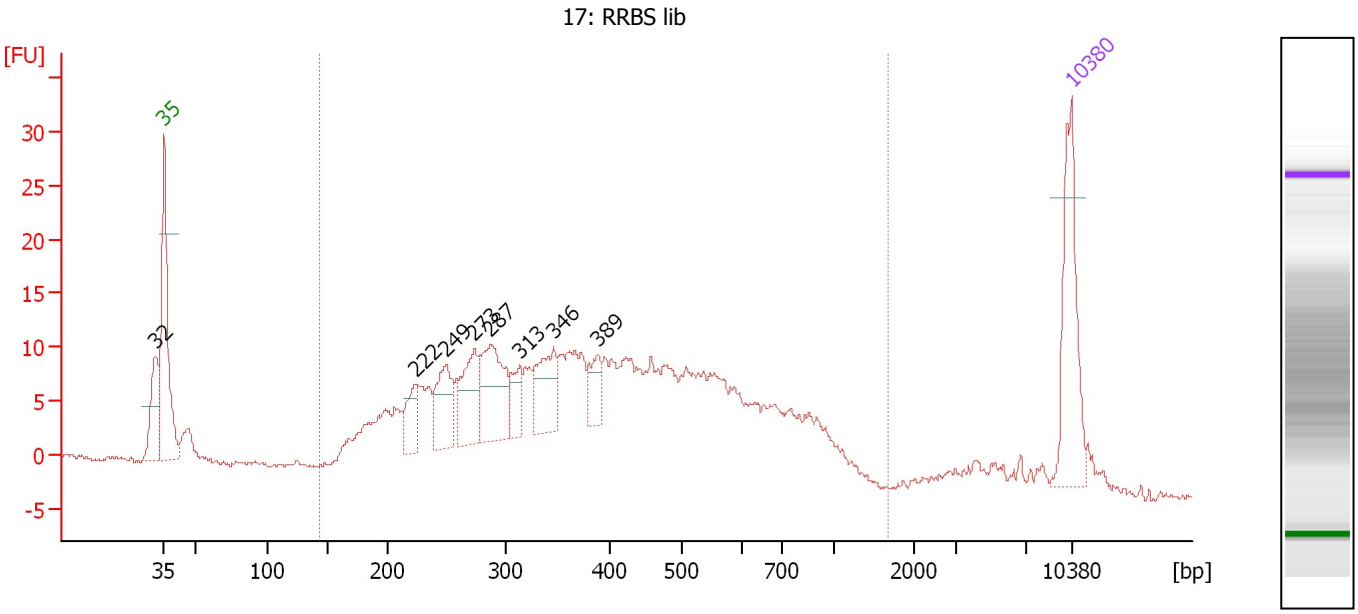
**Region table for sample 3 : H803P_Shah**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/µl] | % of Total | Size distribution in CV [%] |
|---|---|---|---|---|---|---|---|
| 134 | 1,000 | 348 | 2,455.6 | 43,035.7 | 8,480.77 | 97 | 36.2 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electropherogram Summary Continued ...**




**Overall Results for sample 4 : 17: RRBS lib**

| | | | |
|---|---|---|---|
| Number of peaks found: | 8 | Corr. Area 1: | 413.9 |
| Noise: | 0.3 | | |

**Peak table for sample 4 : 17: RRBS lib**

| Peak | Size [bp] | Conc. [pg/µl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|---|---|---|---|---|---|
| 1 | 32 | 0.00 | 0.0 | | 42.25 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 222 | 33.40 | 227.6 | | 62.31 |
| 4 | 249 | 55.14 | 335.8 | | 64.72 |
| 5 | 273 | 62.38 | 346.1 | | 66.92 |
| 6 | 287 | 87.66 | 463.0 | | 68.17 |
| 7 | 313 | 25.03 | 121.0 | | 70.42 |
| 8 | 346 | 54.87 | 240.4 | | 73.02 |
| 9 | 389 | 24.44 | 95.3 | | 76.42 |
| 10 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

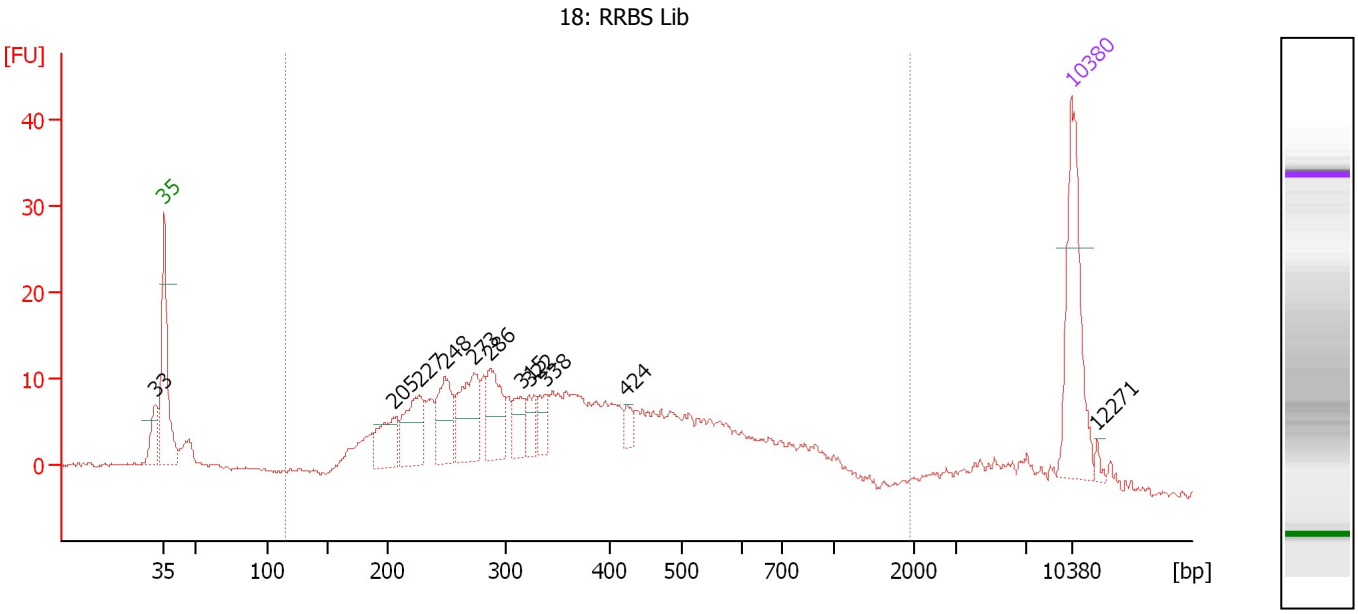
**Region table for sample 4 : 17: RRBS lib**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/µl] | % of Total | Size distribution in CV [%] |
|---|---|---|---|---|---|---|---|
| 143 | 1,675 | 425 | 413.9 | 5,657.2 | 1,246.27 | 93 | 43.9 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electropherogram Summary Continued ...**




**Overall Results for sample 5 : 18: RRBS Lib**

| | | | |
|---|---|---|---|
| Number of peaks found: | 11 | Corr. Area 1: | 390.2 |
| Noise: | 0.2 | | |

**Peak table for sample 5 : 18: RRBS Lib**

| Peak | Size [bp] | Conc. [pg/µl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|---|---|---|---|---|---|
| 1 | 33 | 0.00 | 0.0 | | 42.29 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 205 | 44.74 | 330.7 | | 60.74 |
| 4 | 227 | 58.12 | 388.4 | | 62.71 |
| 5 | 248 | 53.28 | 324.9 | | 64.68 |
| 6 | 273 | 67.32 | 373.7 | | 66.91 |
| 7 | 286 | 50.60 | 267.7 | | 68.12 |
| 8 | 315 | 24.49 | 117.8 | | 70.55 |
| 9 | 322 | 19.07 | 89.6 | | 71.15 |
| 10 | 338 | 18.53 | 83.0 | | 72.42 |
| 11 | 424 | 10.59 | 37.9 | | 78.68 |
| 12 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 13 | 12,271 | 0.00 | 0.0 | | 114.97 |

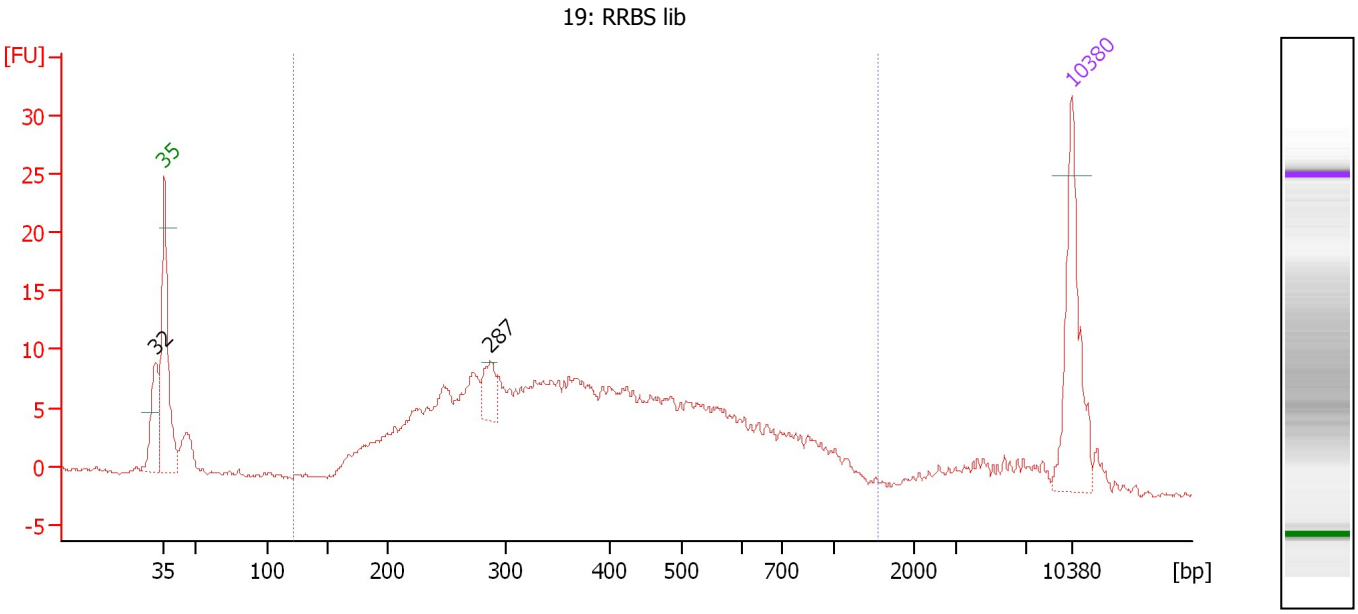
**Region table for sample 5 : 18: RRBS Lib**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Color [pg/µl] | % of Total | Size distribution in CV [%] |
|---|---|---|---|---|---|---|---|
| 115 | 1,937 | 407 | 390.2 | 4,470.8 | 931.67 | 88 | 49.0 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 PM

**Electropherogram Summary Continued ...**




**Overall Results for sample 6 : 19: RRBS lib**

| | | | |
|---|---|---|---|
| Number of peaks found: | 2 | Corr. Area 1: | 311.9 |
| Noise: | 0.2 | | |

**Peak table for sample 6 : 19: RRBS lib**

| Peak | | Size [bp] | Conc. [pg/µl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|---|---|---|---|---|---|---|
| 1 | | 32 | 0.00 | 0.0 | | 42.24 |
| 2 | ◀ | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | | 287 | 28.80 | 152.3 | | 68.13 |
| 4 | ▶ | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

**Region table for sample 6 : 19: RRBS lib**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/µl] | % of Total | Size distribution in CV [%] |
|---|---|---|---|---|---|---|---|
| 122 | 1,552 | 424 | 311.9 | 4,562.7 | 1,003.41 | 89 | 46.0 |

| | | | |
|---|---|---|---|
| Assay Class: | High Sensitivity DNA Assay | Created: | 2/18/2017 1:01:22 PM |
| Data Path: | C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad | Modified: | 2/18/2017 1:28:39 PM |

**Gel Image**

Assay Class: High Sensitivity DNA Assay Created: 2/18/2017 1:01:22 PM
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad Modified: 2/18/2017 1:28:39 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: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad

Created: 2/18/2017 1:01:22 PM
Modified: 2/18/2017 1:28:39 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 | | 2/18/2017 1:28:23 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-02-18\2017-02-18_002.xad) | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 2/18/2017 1:01:27 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |