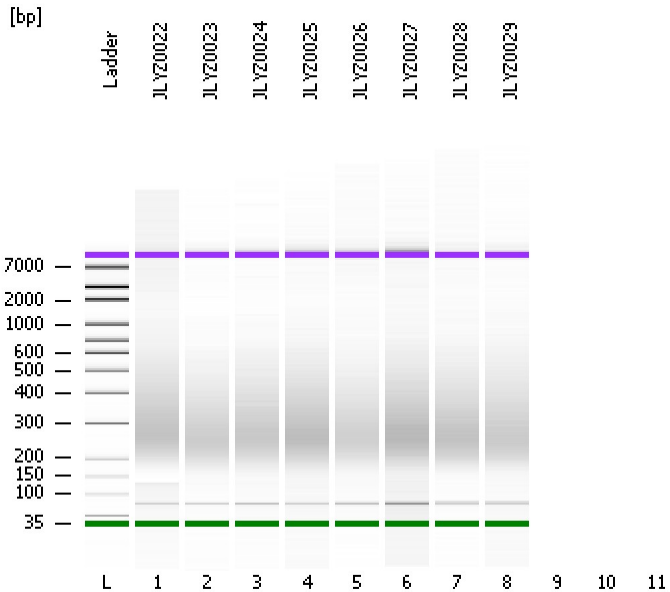


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
Modified: 10/6/2017 12:22:45 PM

Electrophoresis File Run Summary



Instrument Information:

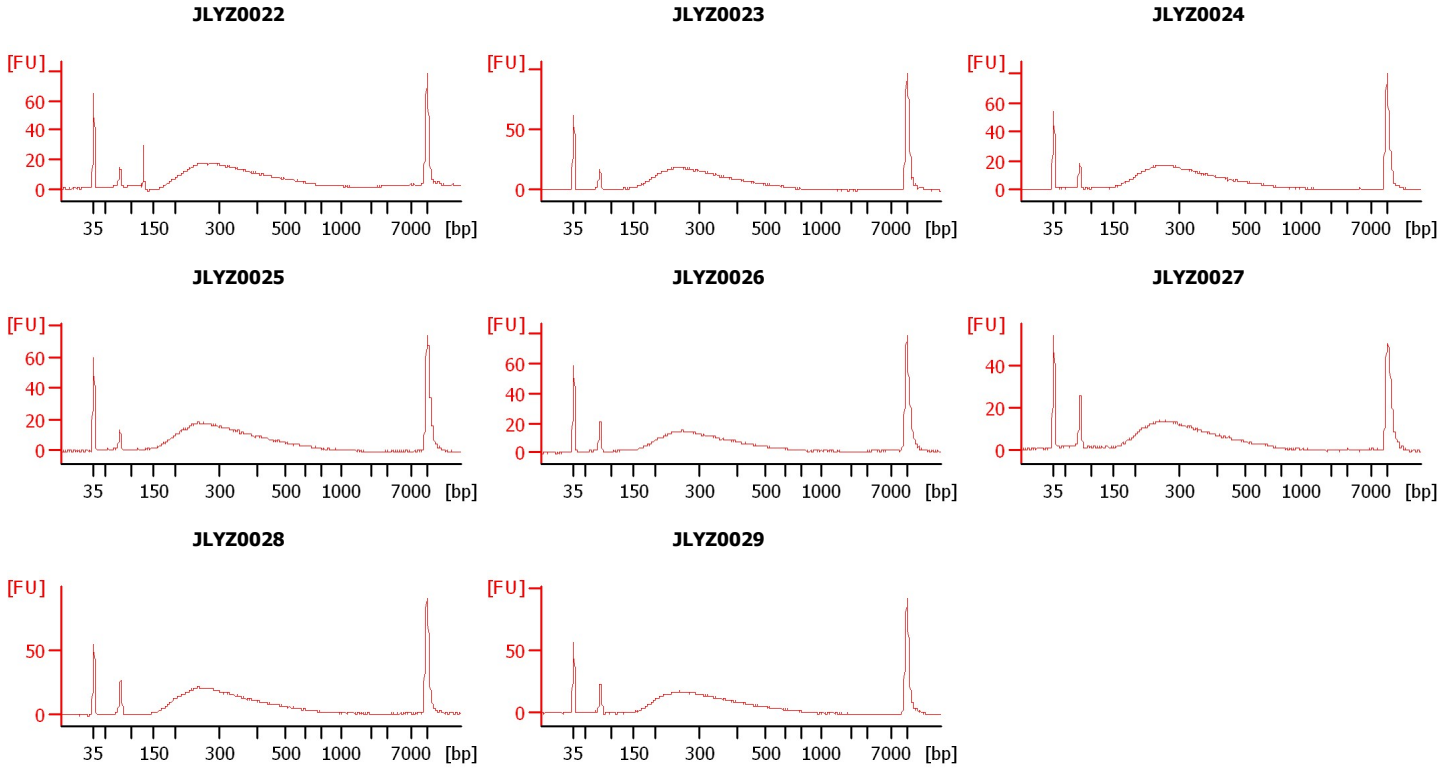
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| JLYZ0022 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0023 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0024 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0025 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0026 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0027 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0028 | | <input type="checkbox"/> | ✓ | | | |
| JLYZ0029 | | <input type="checkbox"/> | ✓ | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
Modified: 10/6/2017 12:22:45 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

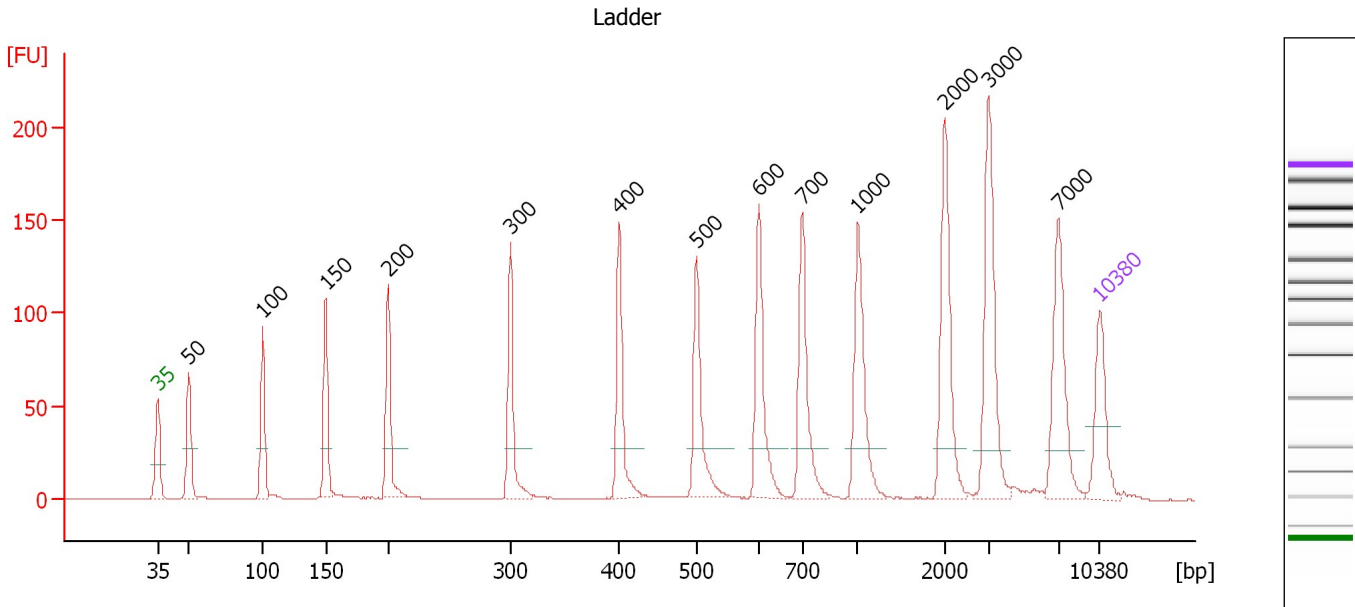
Ladder

| 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\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

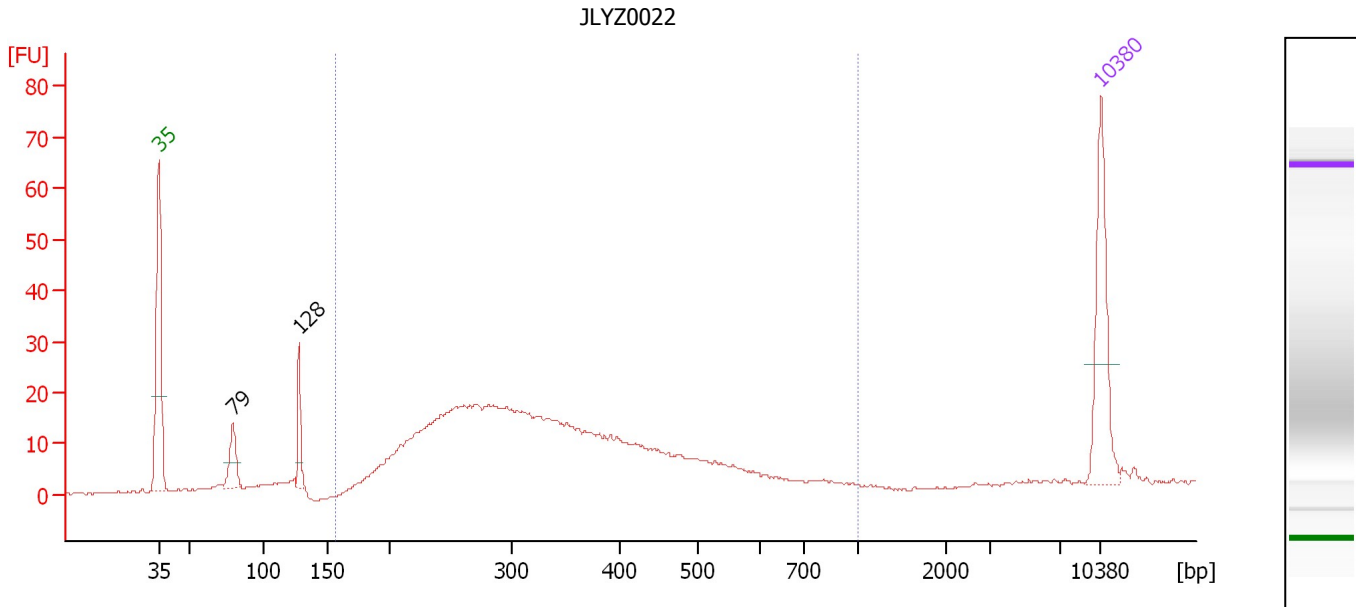
Peak table for Ladder

| 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 | 45.30 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 50.82 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.51 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.16 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 69.22 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 77.26 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 83.06 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 87.66 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 90.88 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 95.02 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.46 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.72 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.92 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : JLYZ0022

Number of peaks found: 2 Corr. Area 1: 446.1
 Noise: 0.2

Peak table for sample 1 : JLYZ0022

| 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 | 79 | 38.13 | 729.1 | | 48.53 |
| 3 | 128 | 32.47 | 385.6 | | 53.40 |
| 4 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

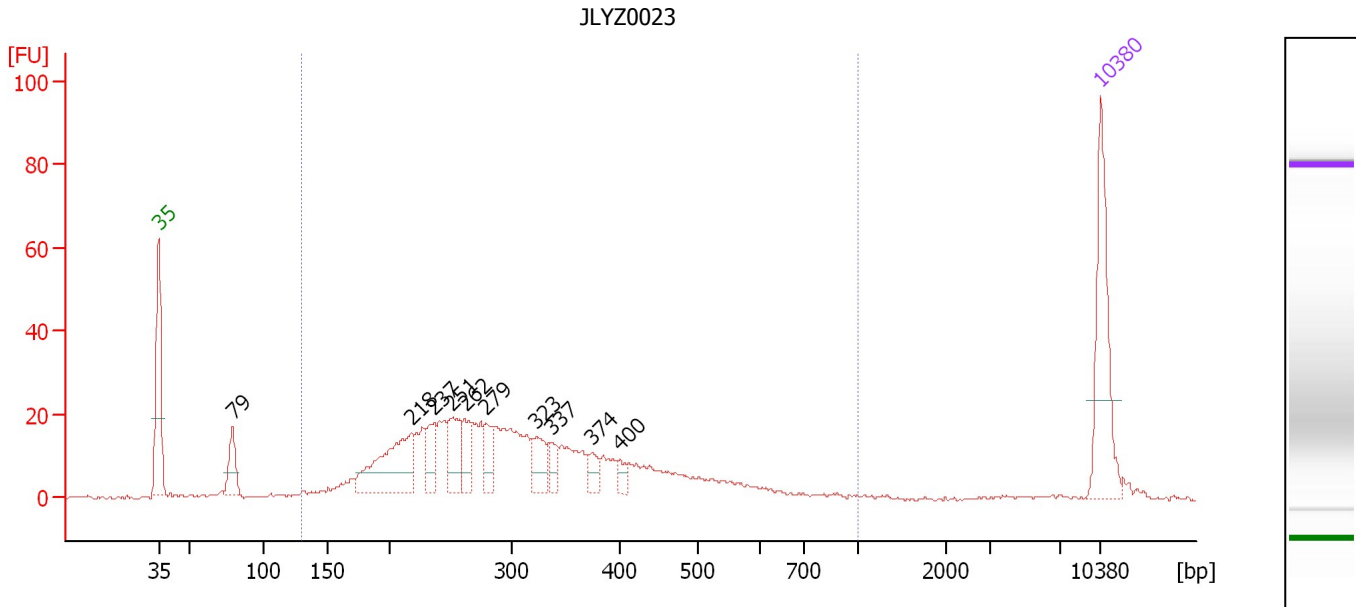
Region table for sample 1 : JLYZ0022

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 158 | 1,000 | 342 | 446.1 | 4,333.2 | 857.54 | 87 | 33.6 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : JLYZ0023

Number of peaks found: 10 Corr. Area 1: 506.1
 Noise: 0.5

Peak table for sample 2 : JLYZ0023

| 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 | 79 | 37.03 | 711.1 | | 48.49 |
| 3 | 218 | 107.35 | 745.1 | | 61.81 |
| 4 | 237 | 27.07 | 173.1 | | 63.50 |
| 5 | 251 | 46.68 | 281.3 | | 64.82 |
| 6 | 262 | 32.75 | 189.5 | | 65.75 |
| 7 | 279 | 22.78 | 123.5 | | 67.35 |
| 8 | 323 | 31.17 | 146.3 | | 71.06 |
| 9 | 337 | 15.64 | 70.2 | | 72.23 |
| 10 | 374 | 13.42 | 54.3 | | 75.18 |
| 11 | 400 | 10.37 | 39.3 | | 77.25 |
| 12 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

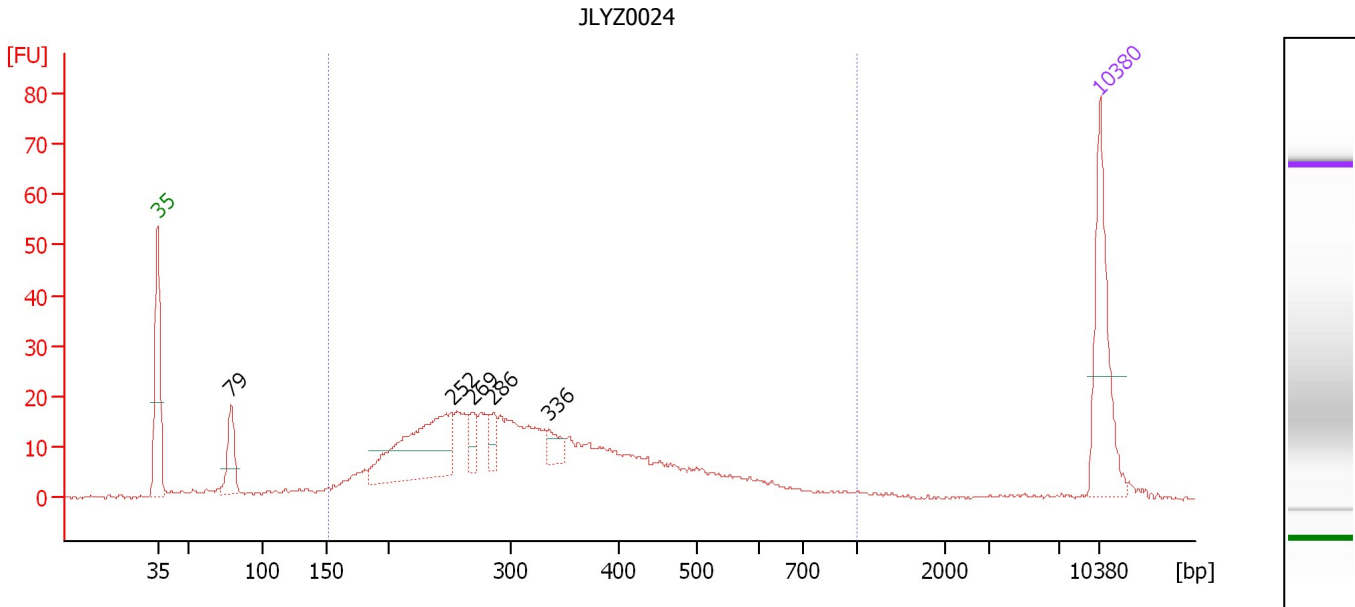
Region table for sample 2 : JLYZ0023

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 129 | 1,000 | 320 | 506.1 | 4,143.1 | 750.99 | 93 | 35.8 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : JLYZ0024

Number of peaks found: 5 Corr. Area 1: 476.6
 Noise: 0.3

Peak table for sample 3 : JLYZ0024

| 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 | 79 | 44.95 | 865.8 | | 48.46 |
| 3 | 252 | 143.78 | 865.2 | | 64.85 |
| 4 | 269 | 21.43 | 120.8 | | 66.38 |
| 5 | 286 | 16.87 | 89.5 | | 67.91 |
| 6 | 336 | 16.85 | 76.1 | | 72.08 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

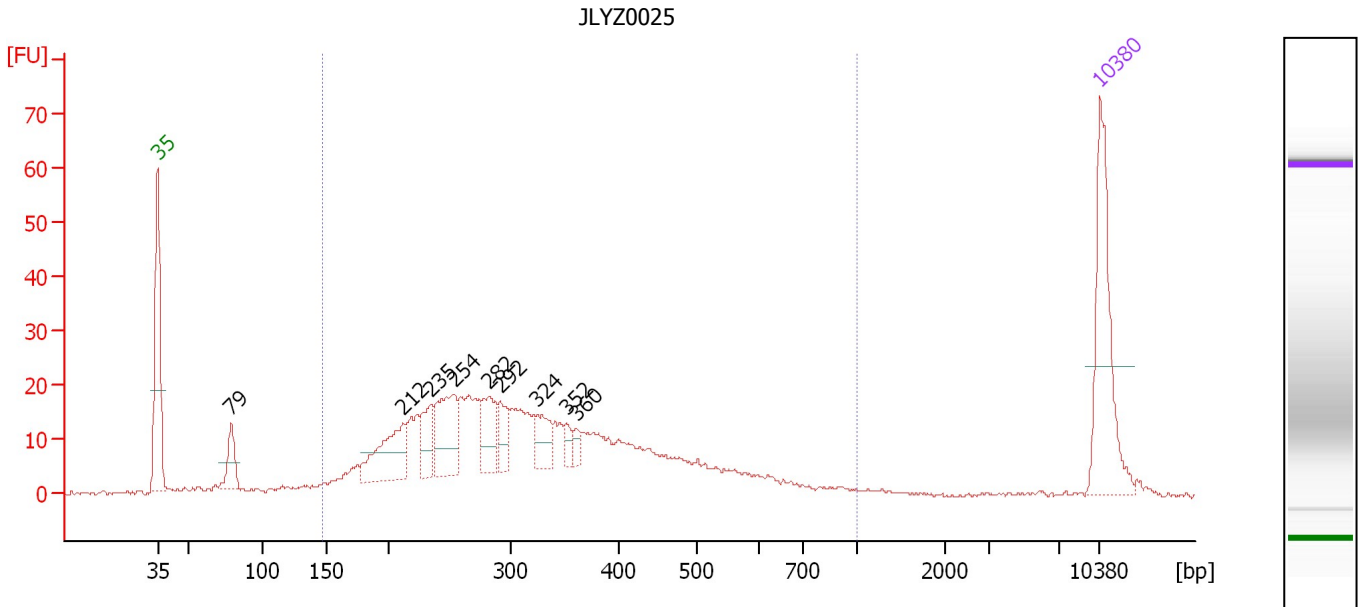
Region table for sample 3 : JLYZ0024

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 152 | 1,000 | 337 | 476.6 | 4,045.9 | 764.42 | 87 | 37.7 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : JLYZ0025

Number of peaks found: 9 Corr. Area 1: 524.4
 Noise: 0.3

Peak table for sample 4 : JLYZ0025

| 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 | 79 | 30.97 | 595.2 | | 48.48 |
| 3 | 212 | 67.22 | 480.0 | | 61.26 |
| 4 | 235 | 31.10 | 200.6 | | 63.31 |
| 5 | 254 | 67.74 | 404.4 | | 65.03 |
| 6 | 282 | 37.62 | 201.8 | | 67.62 |
| 7 | 292 | 20.89 | 108.6 | | 68.45 |
| 8 | 324 | 27.58 | 129.0 | | 71.15 |
| 9 | 352 | 9.45 | 40.7 | | 73.40 |
| 10 | 360 | 8.35 | 35.1 | | 74.08 |
| 11 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

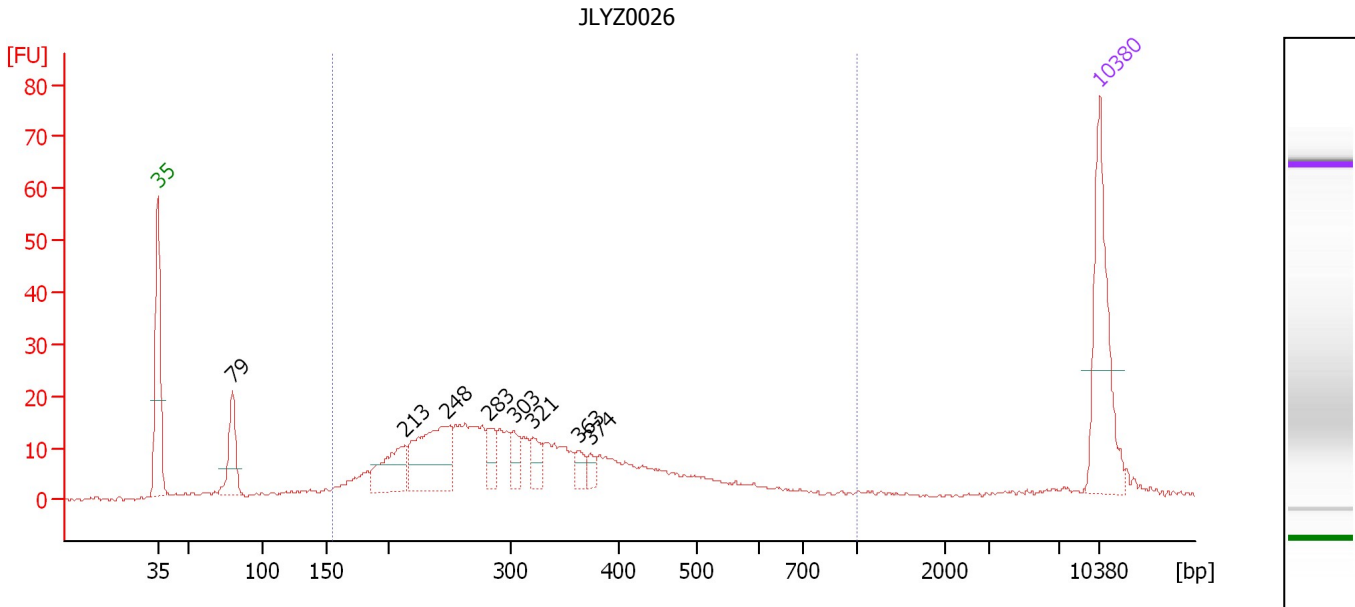
Region table for sample 4 : JLYZ0025

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 147 | 1,000 | 339 | 524.4 | 4,321.2 | 814.60 | 88 | 38.9 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : JLYZ0026

Number of peaks found: 8 Corr. Area 1: 379.5
 Noise: 0.4

Peak table for sample 5 : JLYZ0026

| 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 | 79 | 48.19 | 918.8 | | 48.55 |
| 3 | 213 | 50.59 | 359.7 | | 61.34 |
| 4 | 248 | 91.08 | 556.2 | | 64.52 |
| 5 | 283 | 17.43 | 93.4 | | 67.64 |
| 6 | 303 | 16.09 | 80.4 | | 69.47 |
| 7 | 321 | 16.63 | 78.5 | | 70.91 |
| 8 | 363 | 10.82 | 45.2 | | 74.28 |
| 9 | 374 | 7.43 | 30.1 | | 75.17 |
| 10 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

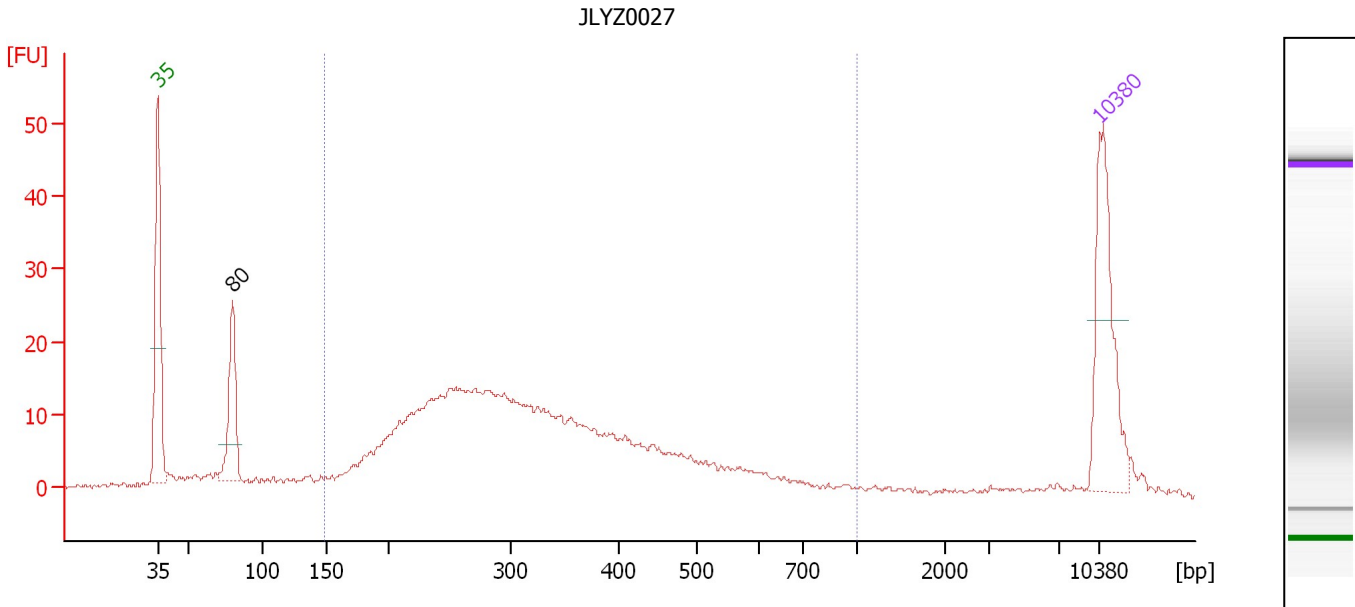
Region table for sample 5 : JLYZ0026

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 155 | 1,000 | 326 | 379.5 | 3,115.6 | 578.47 | 83 | 36.1 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : JLYZ0027

Number of peaks found: 1 Corr. Area 1: 380.1
 Noise: 0.3

Peak table for sample 6 : JLYZ0027

| 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 | 80 | 73.59 | 1,399.6 | | 48.57 |
| 3 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

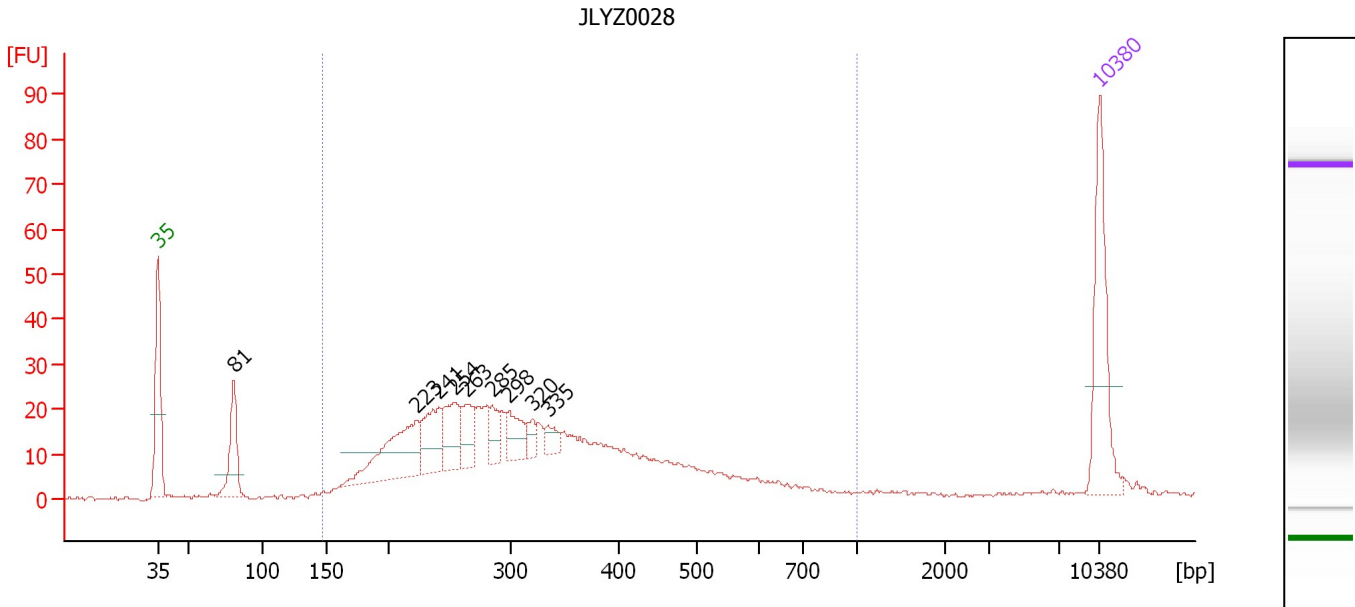
Region table for sample 6 : JLYZ0027

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 149 | 1,000 | 336 | 380.1 | 3,678.9 | 696.70 | 82 | 37.0 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : JLYZ0028

Number of peaks found: 9 Corr. Area 1: 579.1
 Noise: 0.4

Peak table for sample 7 : JLYZ0028

| 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 | 81 | 65.45 | 1,231.1 | | 48.67 |
| 3 | 223 | 102.16 | 693.3 | | 62.26 |
| 4 | 241 | 55.81 | 350.5 | | 63.90 |
| 5 | 254 | 49.50 | 295.6 | | 65.02 |
| 6 | 263 | 32.43 | 186.6 | | 65.89 |
| 7 | 285 | 22.95 | 122.1 | | 67.83 |
| 8 | 298 | 31.05 | 157.7 | | 69.06 |
| 9 | 320 | 13.09 | 62.0 | | 70.80 |
| 10 | 335 | 13.17 | 59.6 | | 72.02 |
| 11 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

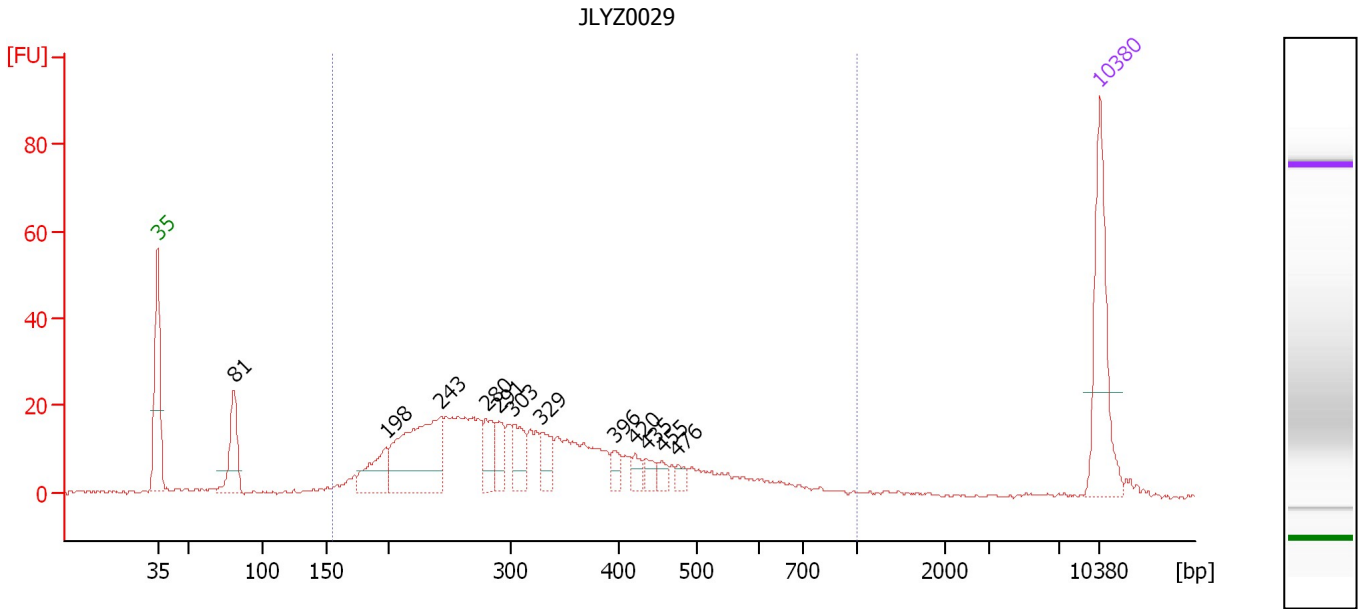
Region table for sample 7 : JLYZ0028

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 147 | 1,000 | 335 | 579.1 | 4,792.0 | 901.39 | 87 | 37.8 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
 Modified: 10/6/2017 12:22:45 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : JLYZ0029

Number of peaks found: 12 Corr. Area 1: 478.0
 Noise: 0.4

Peak table for sample 8 : JLYZ0029

| 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 | 81 | 56.94 | 1,069.7 | | 48.68 |
| 3 | 198 | 43.48 | 333.1 | | 59.94 |
| 4 | 243 | 139.91 | 873.3 | | 64.03 |
| 5 | 280 | 31.88 | 172.7 | | 67.38 |
| 6 | 291 | 22.96 | 119.7 | | 68.37 |
| 7 | 303 | 33.36 | 166.9 | | 69.45 |
| 8 | 329 | 22.65 | 104.4 | | 71.52 |
| 9 | 396 | 11.82 | 45.2 | | 76.94 |
| 10 | 420 | 11.48 | 41.4 | | 78.44 |
| 11 | 435 | 11.19 | 39.0 | | 79.27 |
| 12 | 455 | 8.03 | 26.8 | | 80.45 |
| 13 | 476 | 7.85 | 25.0 | | 81.64 |
| 14 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

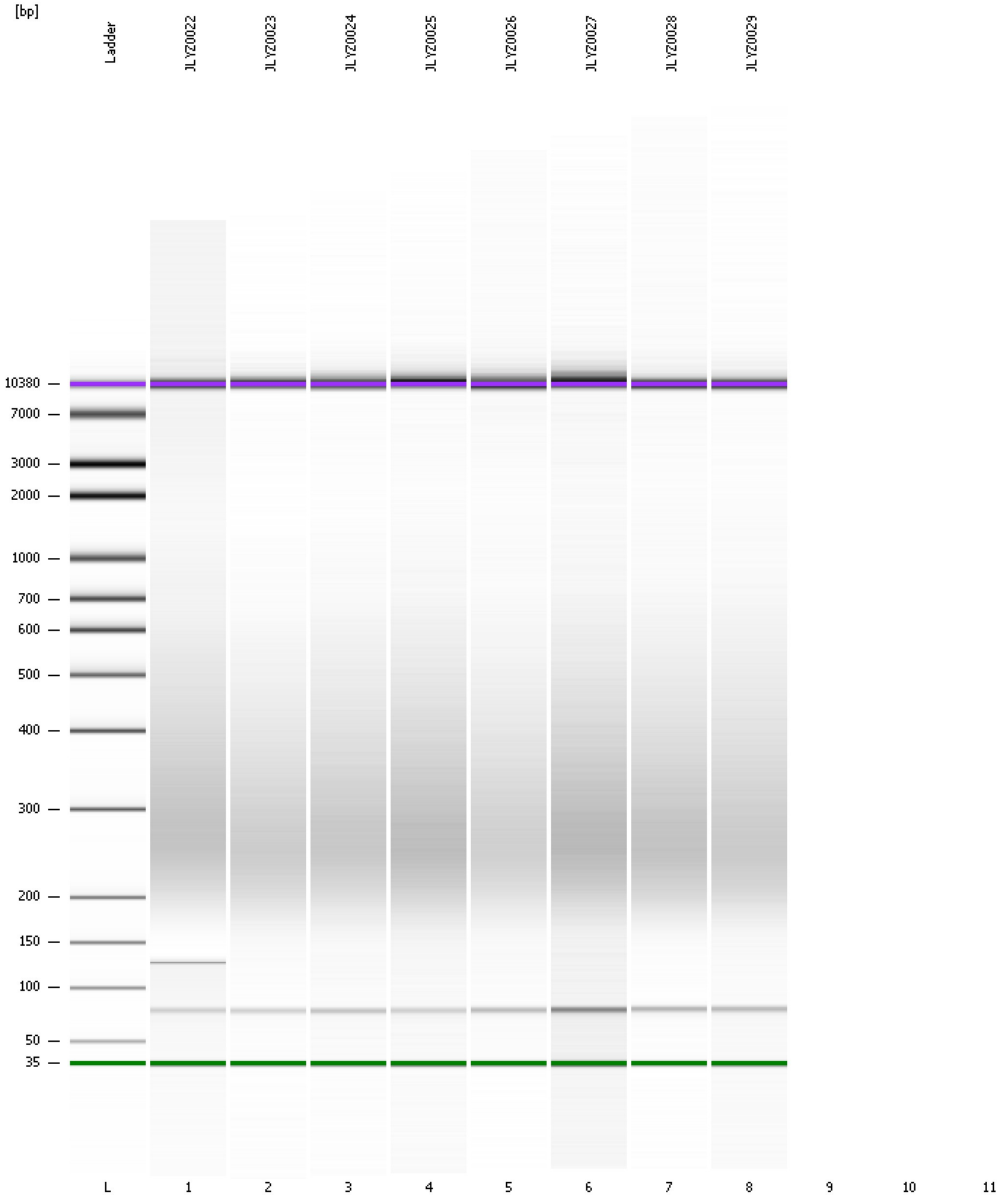
Region table for sample 8 : JLYZ0029

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 154 | 1,000 | 334 | 478.0 | 3,725.7 | 705.41 | 91 | 36.4 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
Modified: 10/6/2017 12:22:45 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-10-06\2017-10-06_002.xad

Created: 10/6/2017 11:40:16 AM
Modified: 10/6/2017 12:22:45 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.