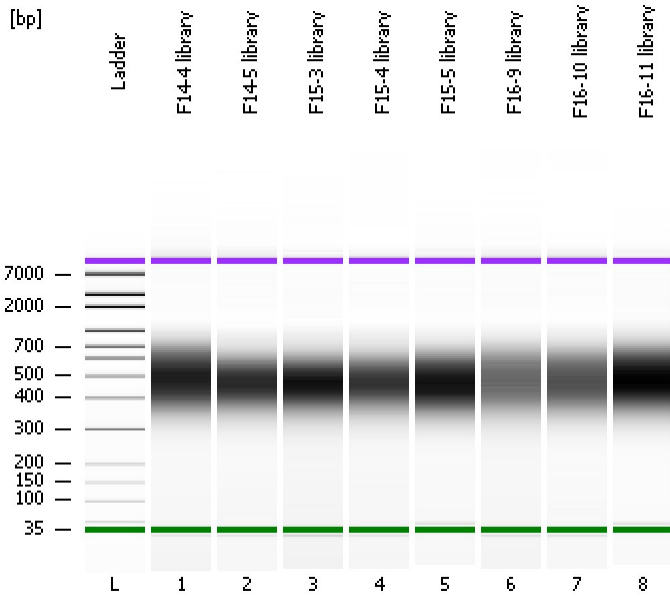


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
Modified: 6/20/2017 10:01:03 AM

**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

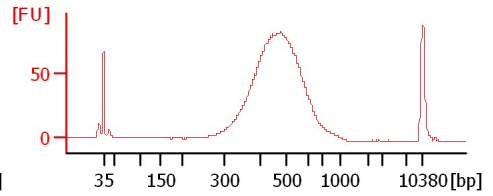
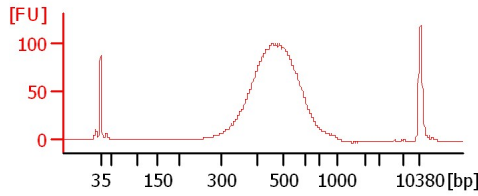
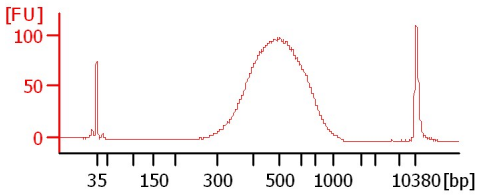
Chip Information:

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

**F14-4 library**

**F14-5 library**

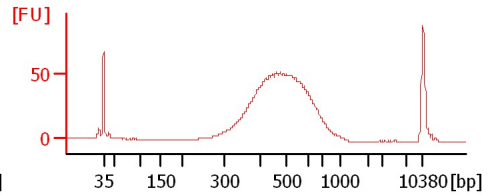
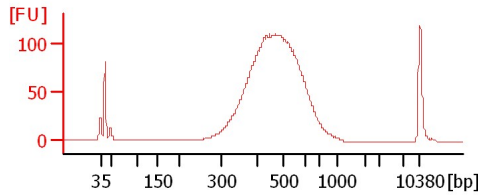
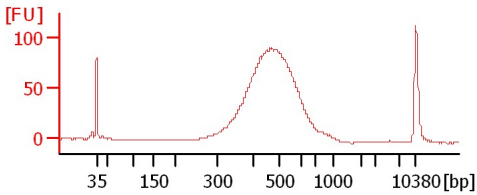
**F15-3 library**



**F15-4 library**

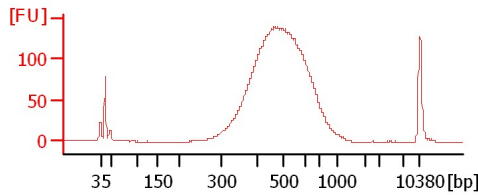
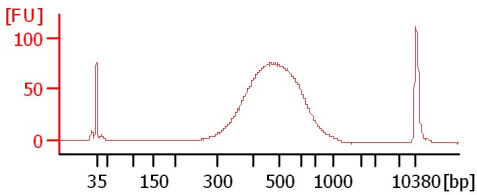
**F15-5 library**

**F16-9 library**



**F16-10 library**

**F16-11 library**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

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

| Sample Name    | Sample Comment | Rest. Digest             | Status | Observation | Result Label | Result Color |
|----------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| F14-4 library  |                | <input type="checkbox"/> | ✓      |             |              |              |
| F14-5 library  |                | <input type="checkbox"/> | ✓      |             |              |              |
| F15-3 library  |                | <input type="checkbox"/> | ✓      |             |              |              |
| F15-4 library  |                | <input type="checkbox"/> | ✓      |             |              |              |
| F15-5 library  |                | <input type="checkbox"/> | ✓      |             |              |              |
| F16-9 library  |                | <input type="checkbox"/> | ✓      |             |              |              |
| F16-10 library |                | <input type="checkbox"/> | ✓      |             |              |              |
| F16-11 library |                | <input type="checkbox"/> | ✓      |             |              |              |
| Ladder         |                | <input type="checkbox"/> | ✓      |             |              |              |

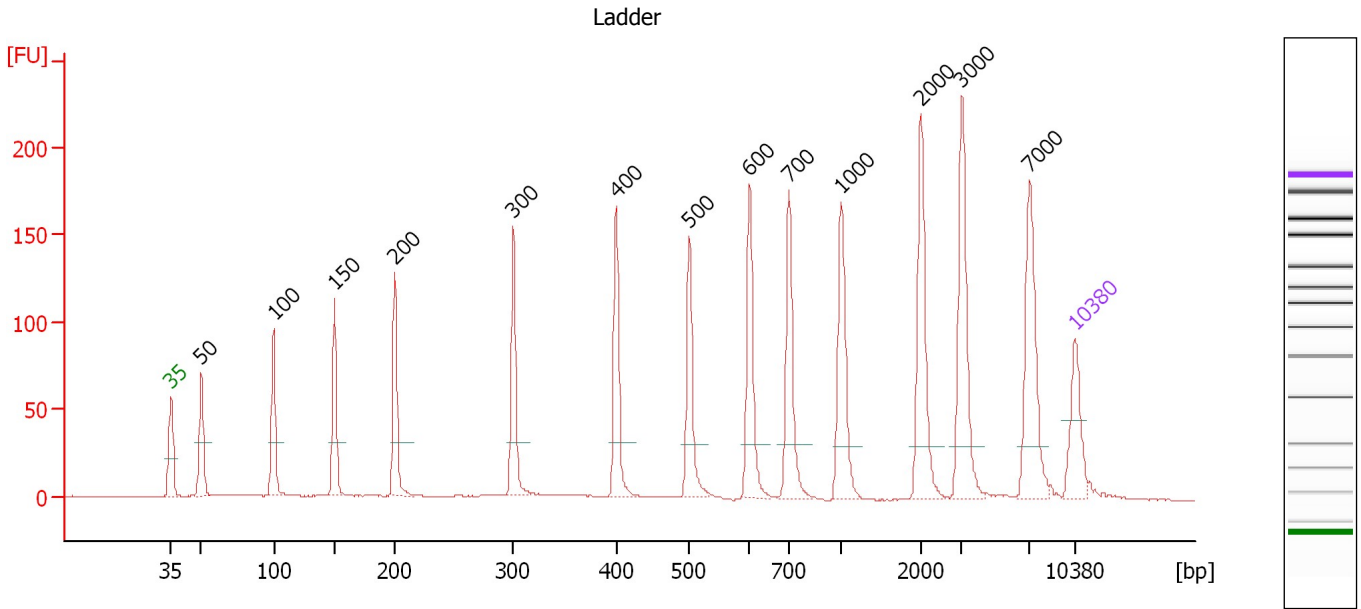
**Chip Lot #** **Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

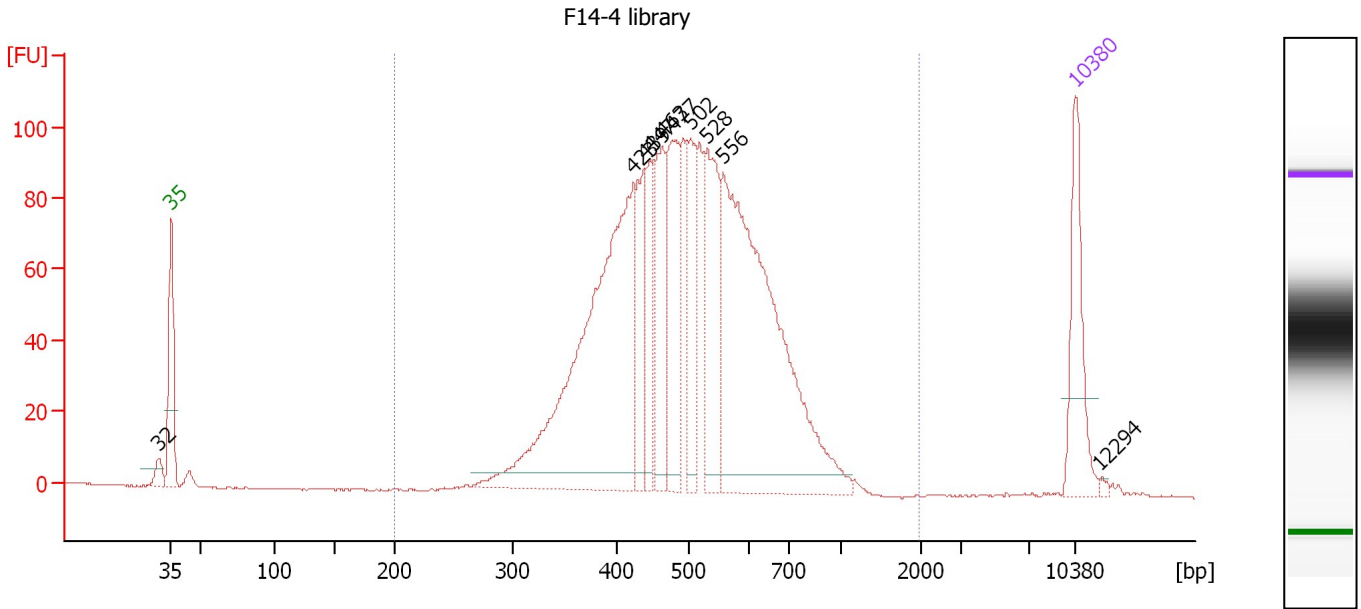
**Peak table for Ladder**

| 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  | 60.34                      |
| 6    | 300       | 150.00        | 757.6             | Ladder Peak  | 69.54                      |
| 7    | 400       | 150.00        | 568.2             | Ladder Peak  | 77.48                      |
| 8    | 500       | 150.00        | 454.5             | Ladder Peak  | 83.17                      |
| 9    | 600       | 150.00        | 378.8             | Ladder Peak  | 87.82                      |
| 10   | 700       | 150.00        | 324.7             | Ladder Peak  | 90.87                      |
| 11   | 1,000     | 150.00        | 227.3             | Ladder Peak  | 94.91                      |
| 12   | 2,000     | 150.00        | 113.6             | Ladder Peak  | 101.07                     |
| 13   | 3,000     | 150.00        | 75.8              | Ladder Peak  | 104.26                     |
| 14   | 7,000     | 150.00        | 32.5              | Ladder Peak  | 109.52                     |
| 15   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : F14-4 library**

Number of peaks found: 10      Corr. Area 1: 1,815.4  
 Noise: 0.2

**Peak table for sample 1 : F14-4 library**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1    | 32        | 0.00          | 0.0               |              | 42.04                      |
| 2    | 35        | 125.00        | 5,411.3           | Lower Marker | 43.00                      |
| 3    | 423       | 516.74        | 1,849.0           |              | 78.82                      |
| 4    | 439       | 99.92         | 345.1             |              | 79.68                      |
| 5    | 447       | 75.16         | 254.7             |              | 80.16                      |
| 6    | 463       | 112.12        | 366.8             |              | 81.07                      |
| 7    | 477       | 132.11        | 419.9             |              | 81.84                      |
| 8    | 502       | 88.54         | 267.0             |              | 83.28                      |
| 9    | 528       | 140.36        | 402.6             |              | 84.48                      |
| 10   | 556       | 504.86        | 1,375.5           |              | 85.78                      |
| 11   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |
| 12   | 12,294    | 0.00          | 0.0               |              | 114.97                     |

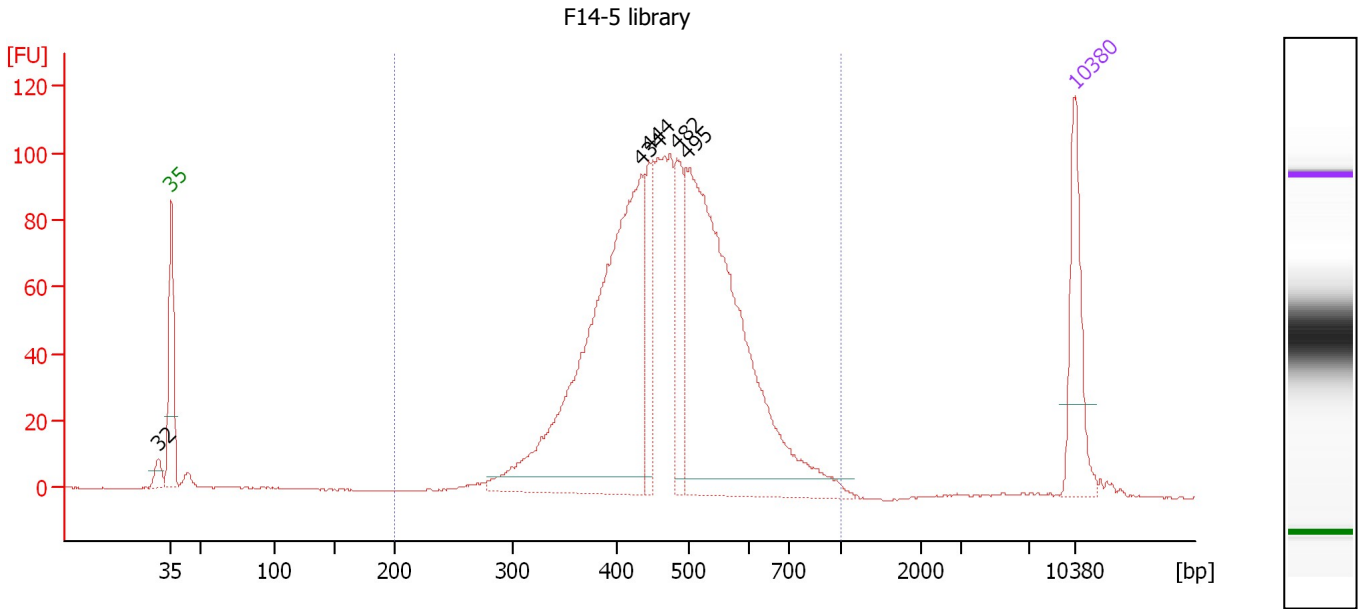
**Region table for sample 1 : F14-4 library**

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 200       | 1,980   | 507               | 1,815.4    | 5,861.8           | 1,826.69             | 99         | 24.4                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : F14-5 library**

Number of peaks found: 5                      Corr. Area 1: 1,593.9  
 Noise: 0.2

**Peak table for sample 2 : F14-5 library**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1    | 32        | 0.00          | 0.0               |              | 42.02                      |
| 2    | 35        | 125.00        | 5,411.3           | Lower Marker | 43.00                      |
| 3    | 434       | 574.91        | 2,006.5           |              | 79.42                      |
| 4    | 444       | 77.46         | 264.0             |              | 80.01                      |
| 5    | 482       | 93.14         | 292.5             |              | 82.17                      |
| 6    | 495       | 586.72        | 1,794.3           |              | 82.91                      |
| 7    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

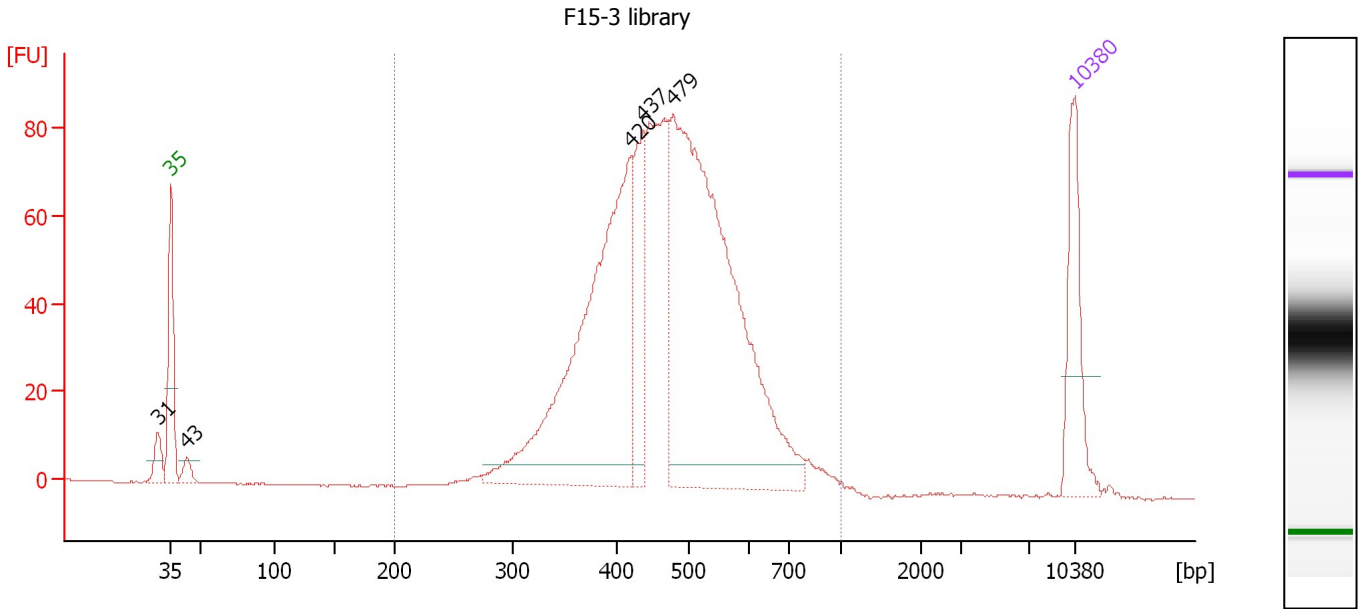
**Region table for sample 2 : F14-5 library**

| 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   | 478               | 1,593.9    | 5,158.2           | 1,537.70             | 97         | 21.0                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : F15-3 library**

Number of peaks found: 5                      Corr. Area 1: 1,322.8  
 Noise: 0.2

**Peak table for sample 3 : F15-3 library**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1    | 31        | 0.00          | 0.0               |              | 41.96                      |
| 2    | 35        | 125.00        | 5,411.3           | Lower Marker | 43.00                      |
| 3    | 43        | 16.57         | 584.7             |              | 44.24                      |
| 4    | 420       | 477.81        | 1,723.6           |              | 78.62                      |
| 5    | 437       | 107.76        | 373.2             |              | 79.61                      |
| 6    | 479       | 676.50        | 2,141.8           |              | 81.95                      |
| 7    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

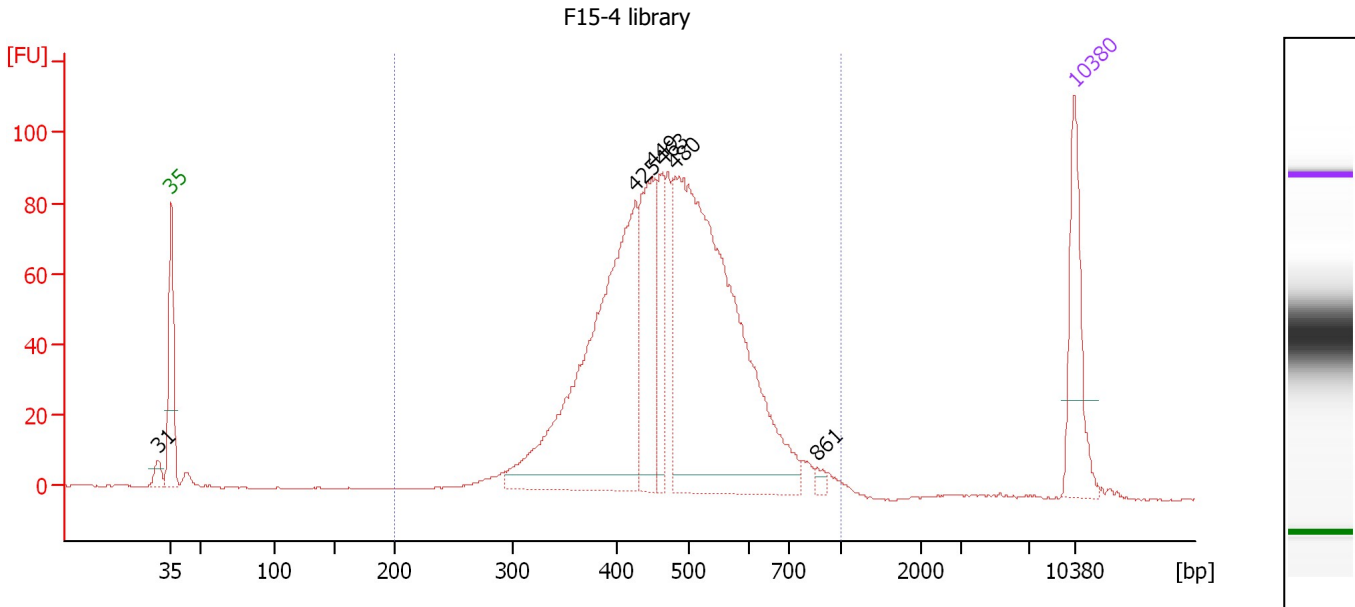
**Region table for sample 3 : F15-3 library**

| 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   | 473               | 1,322.8    | 5,105.2           | 1,511.89         | 98         | 20.5                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : F15-4 library**

Number of peaks found: 6                      Corr. Area 1: 1,405.5  
 Noise: 0.2

**Peak table for sample 4 : F15-4 library**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1    | 31        | 0.00          | 0.0               |              | 41.99                      |
| 2    | 35        | 125.00        | 5,411.3           | Lower Marker | 43.00                      |
| 3    | 425       | 469.50        | 1,673.3           |              | 78.91                      |
| 4    | 449       | 151.18        | 509.9             |              | 80.28                      |
| 5    | 463       | 74.74         | 244.8             |              | 81.04                      |
| 6    | 480       | 638.99        | 2,015.4           |              | 82.05                      |
| 7    | 861       | 6.08          | 10.7              |              | 93.04                      |
| 8    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

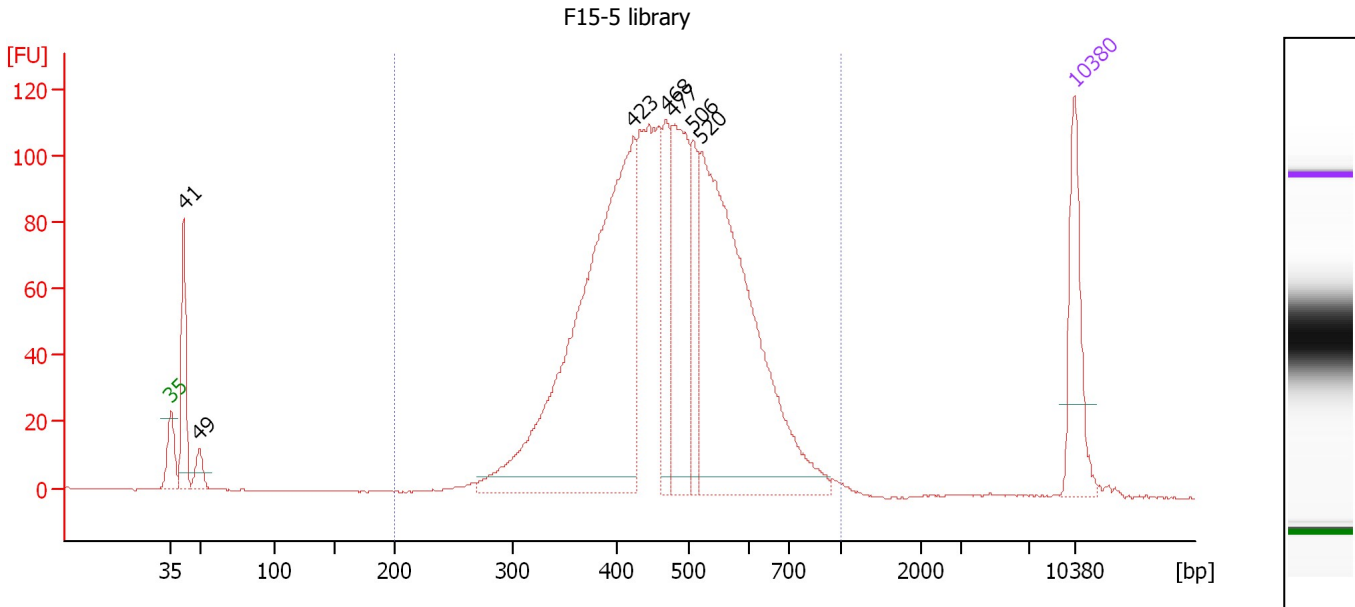
**Region table for sample 4 : F15-4 library**

| 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   | 479               | 1,405.5    | 4,746.5           | 1,419.92             | 98         | 21.0                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : F15-5 library**

Number of peaks found: 7                      Corr. Area 1: 1,984.3  
 Noise: 0.2

**Peak table for sample 5 : F15-5 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    | 41        | 119.34        | 4,365.1           |              | 44.01                      |
| 3    | 49        | 26.31         | 816.7             |              | 45.16                      |
| 4    | 423       | 671.15        | 2,402.6           |              | 78.80                      |
| 5    | 468       | 100.58        | 325.4             |              | 81.37                      |
| 6    | 477       | 189.78        | 602.6             |              | 81.87                      |
| 7    | 506       | 79.56         | 238.4             |              | 83.43                      |
| 8    | 520       | 549.32        | 1,601.5           |              | 84.08                      |
| 9    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

**Region table for sample 5 : F15-5 library**

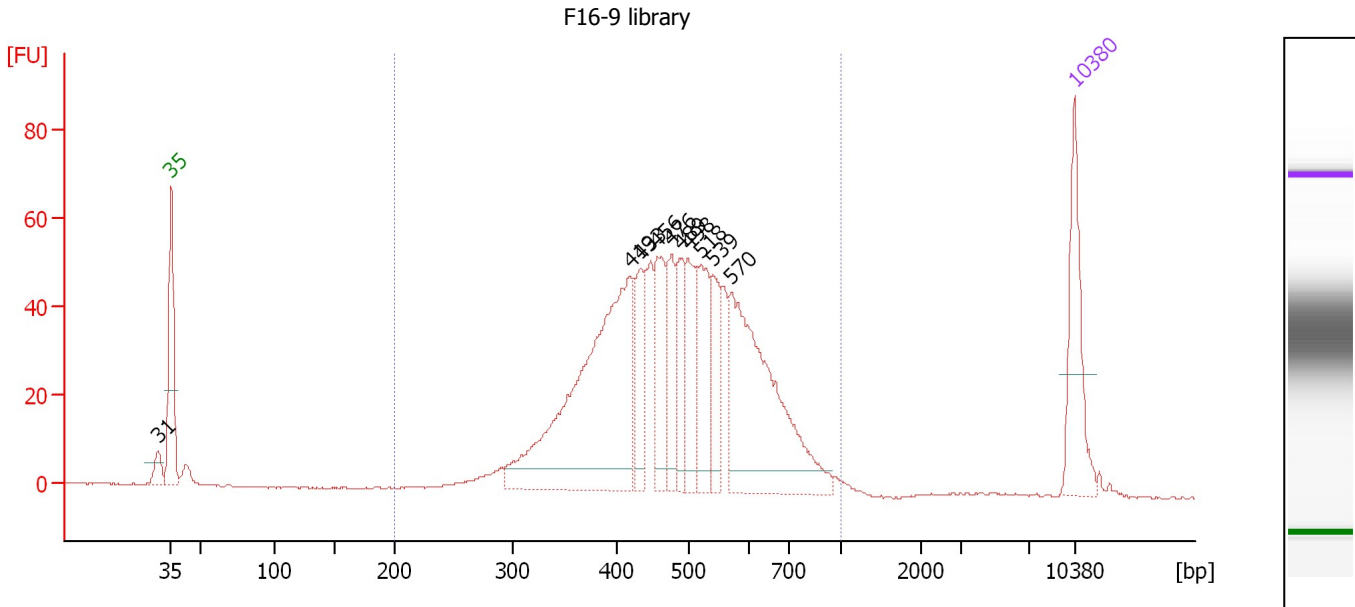
| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 200       | 1,000   | 476               | 1,984.3    | 6,337.5           | 1,875.86         | 94         | 21.5                        |



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : F16-9 library**

Number of peaks found: 10                      Corr. Area 1: 985.2  
 Noise: 0.2

**Peak table for sample 6 : F16-9 library**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1    | 31        | 0.00          | 0.0               |              | 41.98                      |
| 2    | 35        | 125.00        | 5,411.3           | Lower Marker | 43.00                      |
| 3    | 419       | 404.54        | 1,462.9           |              | 78.56                      |
| 4    | 433       | 64.62         | 225.9             |              | 79.38                      |
| 5    | 456       | 85.04         | 282.6             |              | 80.66                      |
| 6    | 476       | 61.89         | 197.1             |              | 81.79                      |
| 7    | 489       | 56.84         | 176.0             |              | 82.55                      |
| 8    | 498       | 72.76         | 221.3             |              | 83.07                      |
| 9    | 518       | 81.19         | 237.7             |              | 83.99                      |
| 10   | 539       | 56.38         | 158.6             |              | 84.96                      |
| 11   | 570       | 264.41        | 702.3             |              | 86.44                      |
| 12   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

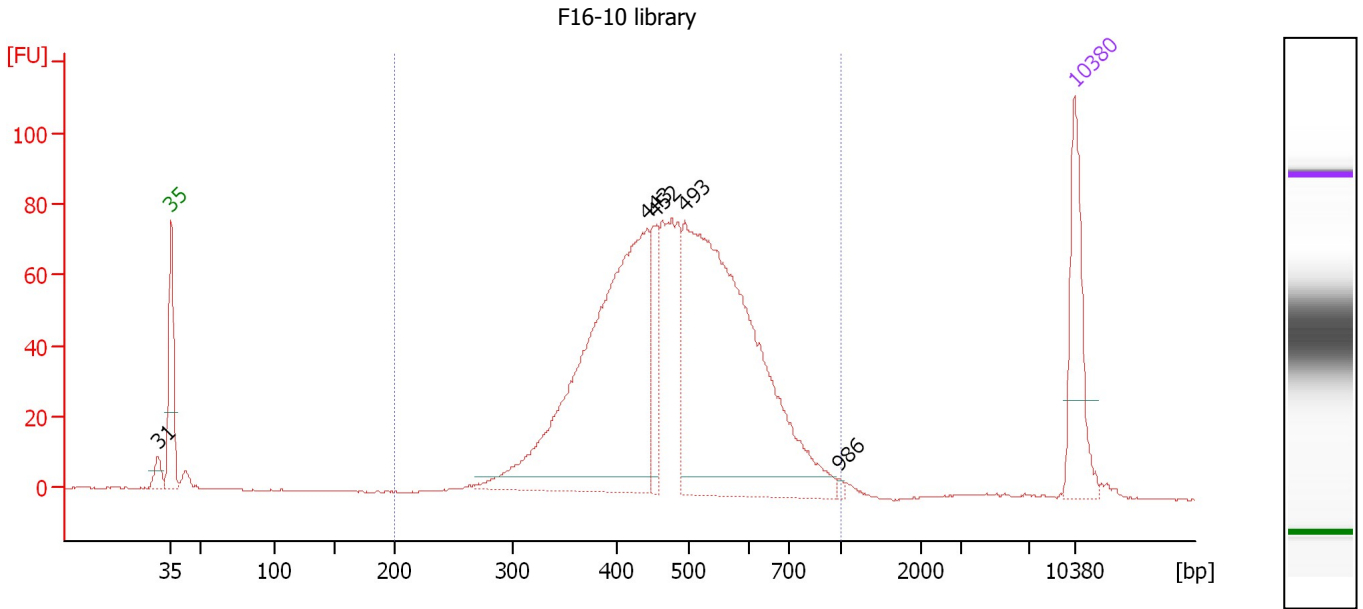
**Region table for sample 6 : F16-9 library**

| 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   | 490               | 985.2      | 4,338.1           | 1,306.82             | 97         | 23.3                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : F16-10 library**

Number of peaks found: 5                      Corr. Area 1: 1,369.0  
 Noise: 0.2

**Peak table for sample 7 : F16-10 library**

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1    | 31        | 0.00          | 0.0               |              | 41.97                      |
| 2    | 35        | 125.00        | 5,411.3           | Lower Marker | 43.00                      |
| 3    | 443       | 518.67        | 1,775.6           |              | 79.90                      |
| 4    | 452       | 60.82         | 204.1             |              | 80.42                      |
| 5    | 493       | 588.31        | 1,807.0           |              | 82.79                      |
| 6    | 986       | 2.95          | 4.5               |              | 94.73                      |
| 7    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

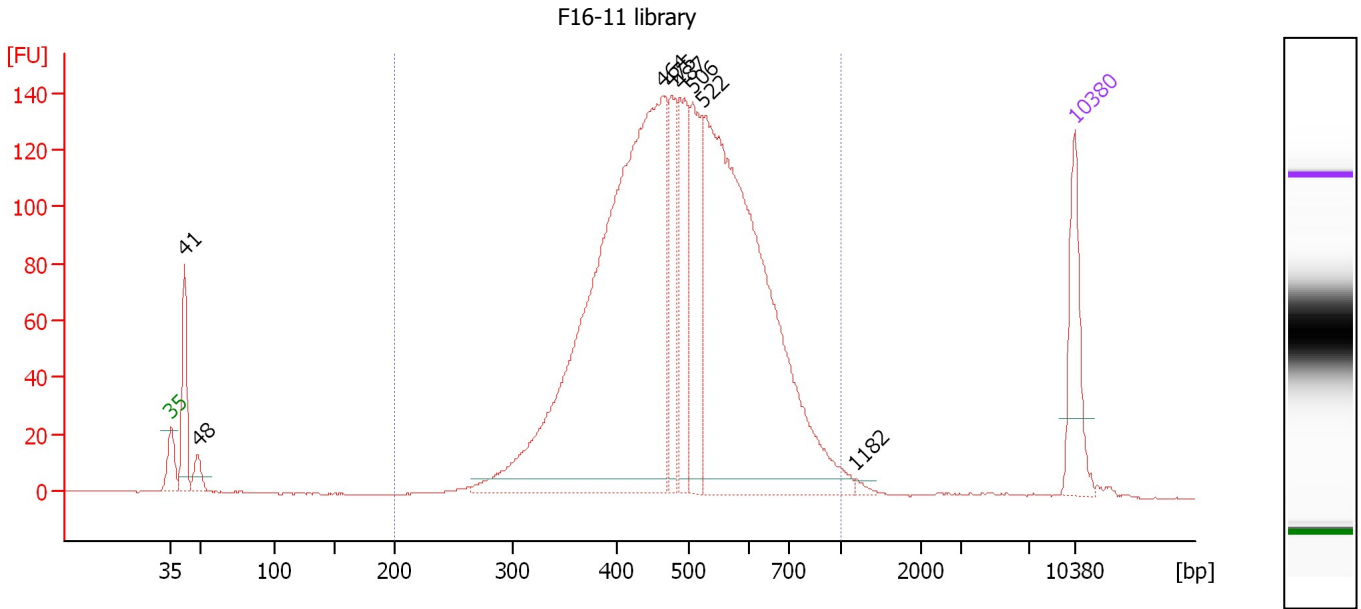
**Region table for sample 7 : F16-10 library**

| 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   | 488               | 1,369.0    | 4,337.3           | 1,310.20             | 98         | 22.5                        |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
 Modified: 6/20/2017 10:01:03 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : F16-11 library**

Number of peaks found: 8                      Corr. Area 1: 2,549.3  
 Noise: 0.2

**Peak table for sample 8 : F16-11 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    | 41        | 118.72        | 4,335.6           |              | 44.02                      |
| 3    | 48        | 28.63         | 898.2             |              | 45.08                      |
| 4    | 464       | 1,093.30      | 3,566.3           |              | 81.15                      |
| 5    | 475       | 110.17        | 351.3             |              | 81.76                      |
| 6    | 487       | 150.04        | 466.9             |              | 82.42                      |
| 7    | 506       | 151.75        | 454.6             |              | 83.44                      |
| 8    | 522       | 860.85        | 2,498.0           |              | 84.20                      |
| 9    | 1,182     | 4.34          | 5.6               |              | 96.03                      |
| 10   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

**Region table for sample 8 : F16-11 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   | 498               | 2,549.3    | 7,847.5           | 2,412.27         | 95         | 23.0                        |

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...t\data\2017-06-20\2017-06-20\_001\_HiSeq992\_libraries\_1-8.xad

Created: 6/20/2017 9:18:35 AM  
Modified: 6/20/2017 10:01:03 AM

**Gel Image**

