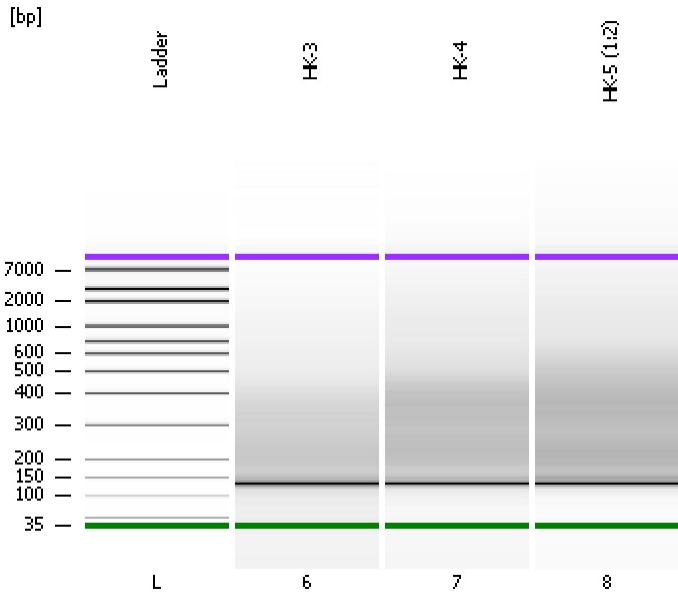


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
Modified: 6/13/2016 4:13:59 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

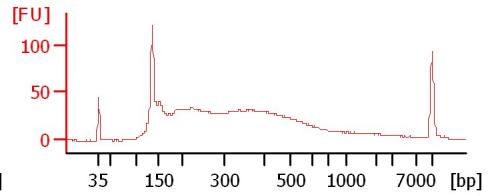
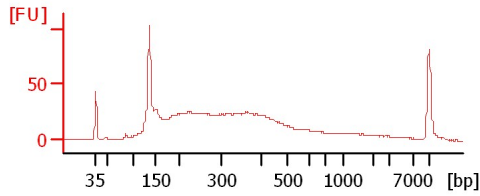
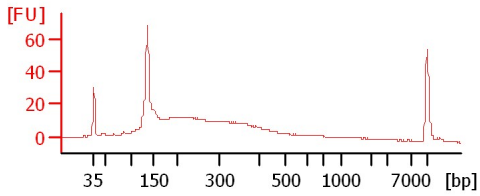
Chip Information:

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

HK-3

HK-4

HK-5 (1:2)



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
 Modified: 6/13/2016 4:13:59 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| HK-3 | | <input type="checkbox"/> | | | | |
| HK-4 | | <input type="checkbox"/> | | | | |
| HK-5 (1:2) | | <input type="checkbox"/> | | | | |
| Ladder | | <input type="checkbox"/> | | | | |

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
Modified: 6/13/2016 4:13:59 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

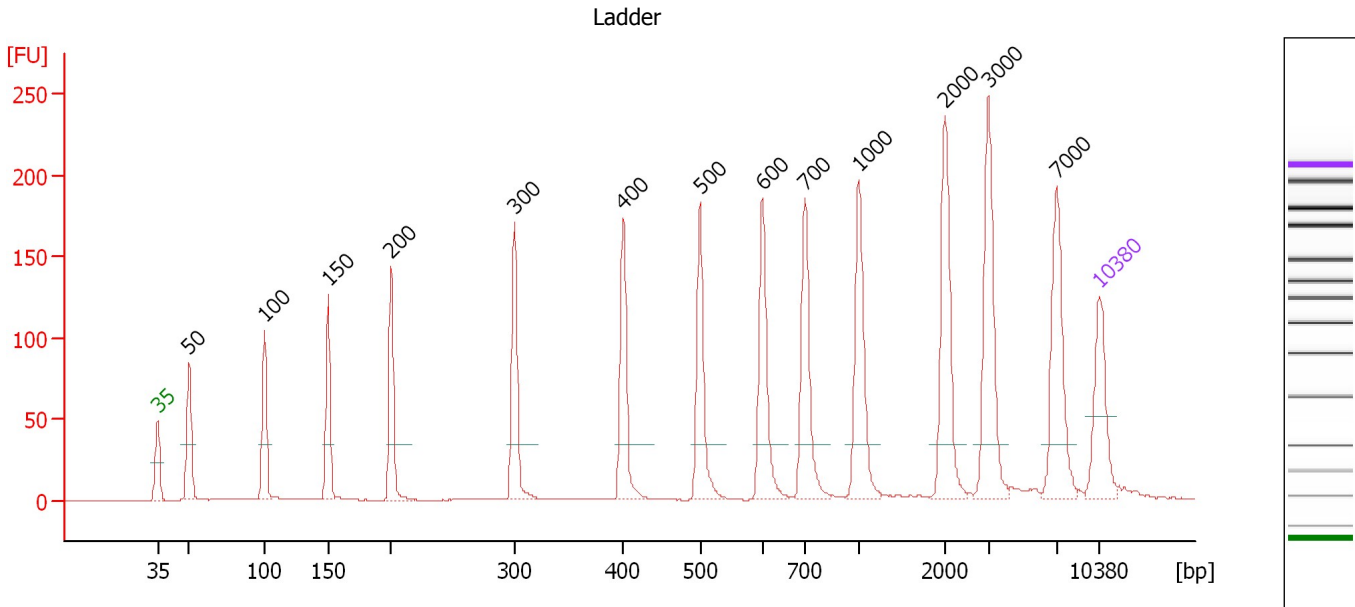
Ladder

| 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:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
 Modified: 6/13/2016 4:13:59 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

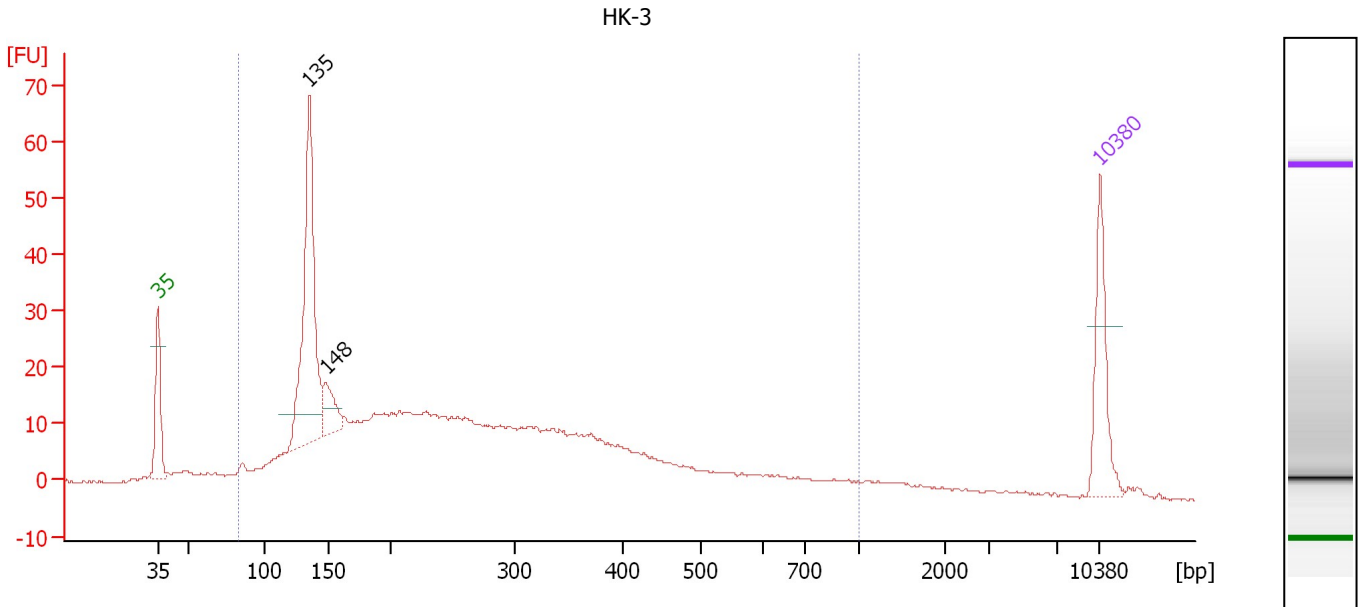
Peak table for Ladder

| 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 | 50.93 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.68 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.37 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 69.53 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 77.60 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 83.28 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 87.93 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 91.08 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 95.11 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.50 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.69 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.76 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
 Modified: 6/13/2016 4:13:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HK-3

Number of peaks found: 2 Corr. Area 1: 615.5
 Noise: 0.3

Peak table for sample 6 : HK-3

| 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 | 135 | 347.83 | 3,903.5 | | 54.25 |
| 3 | 148 | 51.44 | 525.5 | | 55.52 |
| 4 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

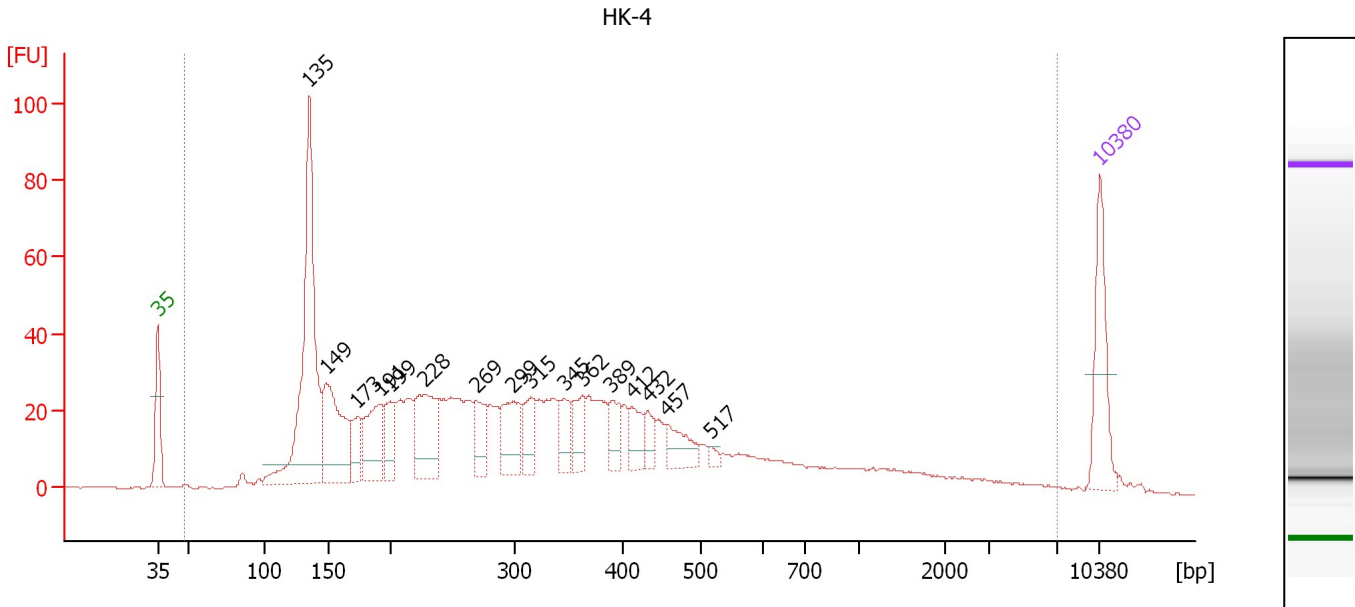
Region table for sample 6 : HK-3

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 82 | 1,000 | 271 | 615.5 | 14,041.3 | 1,783.74 | 95 | 54.6 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
 Modified: 6/13/2016 4:13:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : HK-4

Number of peaks found: 16 Corr. Area 1: 1,309.6
 Noise: 0.1

Peak table for sample 7 : HK-4

| 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 | 135 | 423.34 | 4,749.9 | | 54.26 |
| 3 | 149 | 170.94 | 1,743.7 | | 55.54 |
| 4 | 173 | 46.13 | 404.0 | | 57.84 |
| 5 | 191 | 90.11 | 714.7 | | 59.53 |
| 6 | 199 | 45.06 | 343.7 | | 60.24 |
| 7 | 228 | 125.09 | 832.4 | | 62.90 |
| 8 | 269 | 49.08 | 276.4 | | 66.69 |
| 9 | 299 | 71.99 | 365.2 | | 69.40 |
| 10 | 315 | 42.05 | 202.3 | | 70.73 |
| 11 | 345 | 38.39 | 168.4 | | 73.19 |
| 12 | 362 | 41.63 | 174.3 | | 74.52 |
| 13 | 389 | 32.42 | 126.2 | | 76.72 |
| 14 | 412 | 35.50 | 130.7 | | 78.26 |
| 15 | 432 | 23.13 | 81.1 | | 79.43 |
| 16 | 457 | 41.89 | 139.0 | | 80.81 |
| 17 | 517 | 6.76 | 19.8 | | 84.09 |
| 18 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

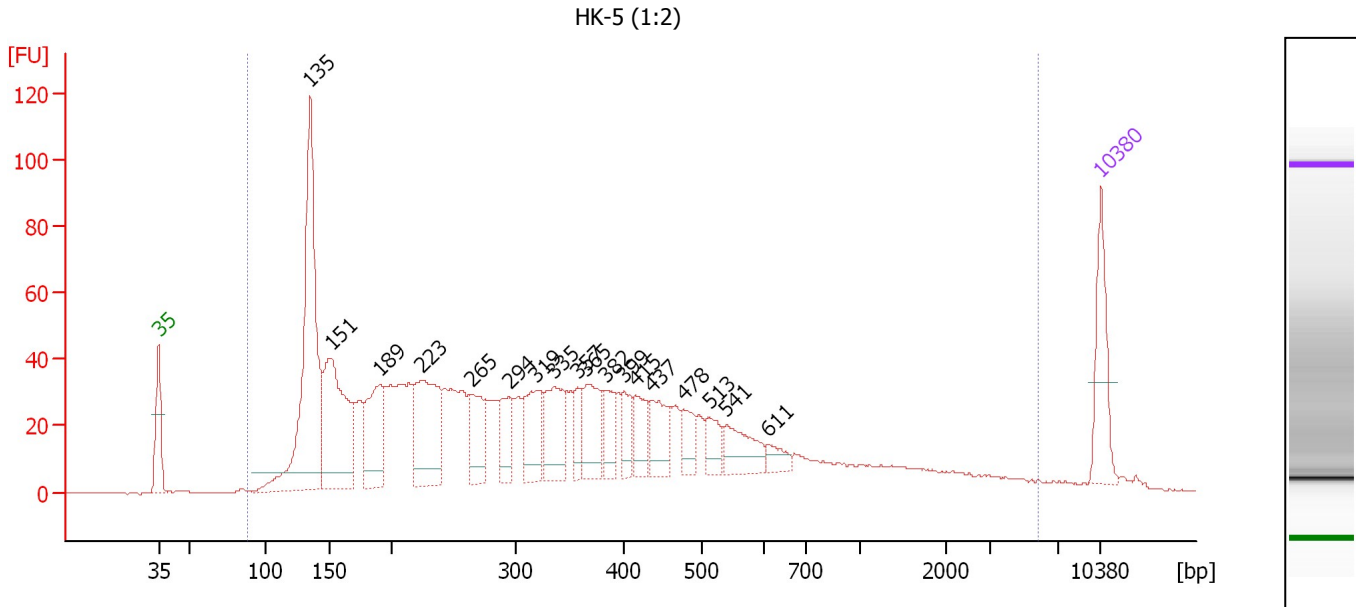
Region table for sample 7 : HK-4

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 48 | 7,035 | 491 | 1,309.6 | 16,118.3 | 2,422.04 | 98 | 100.0 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
 Modified: 6/13/2016 4:13:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : HK-5 (1:2)

Number of peaks found: 18 Corr. Area 1: 1,788.3
 Noise: 0.1

Peak table for sample 8 : HK-5 (1:2)

| 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 | 135 | 511.97 | 5,750.4 | | 54.24 |
| 3 | 151 | 283.47 | 2,838.8 | | 55.80 |
| 4 | 189 | 145.49 | 1,164.0 | | 59.37 |
| 5 | 223 | 198.60 | 1,349.0 | | 62.48 |
| 6 | 265 | 85.75 | 490.4 | | 66.32 |
| 7 | 294 | 63.89 | 328.8 | | 69.01 |
| 8 | 319 | 89.99 | 427.9 | | 71.03 |
| 9 | 335 | 101.97 | 460.7 | | 72.38 |
| 10 | 357 | 40.68 | 172.6 | | 74.14 |
| 11 | 365 | 87.01 | 361.3 | | 74.76 |
| 12 | 382 | 45.47 | 180.3 | | 76.16 |
| 13 | 399 | 41.87 | 158.8 | | 77.56 |
| 14 | 415 | 53.67 | 196.0 | | 78.44 |
| 15 | 437 | 68.86 | 238.9 | | 79.68 |
| 16 | 478 | 39.30 | 124.7 | | 82.02 |
| 17 | 513 | 36.66 | 108.3 | | 83.88 |
| 18 | 541 | 63.76 | 178.7 | | 85.18 |
| 19 | 611 | 20.54 | 50.9 | | 88.28 |
| 20 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

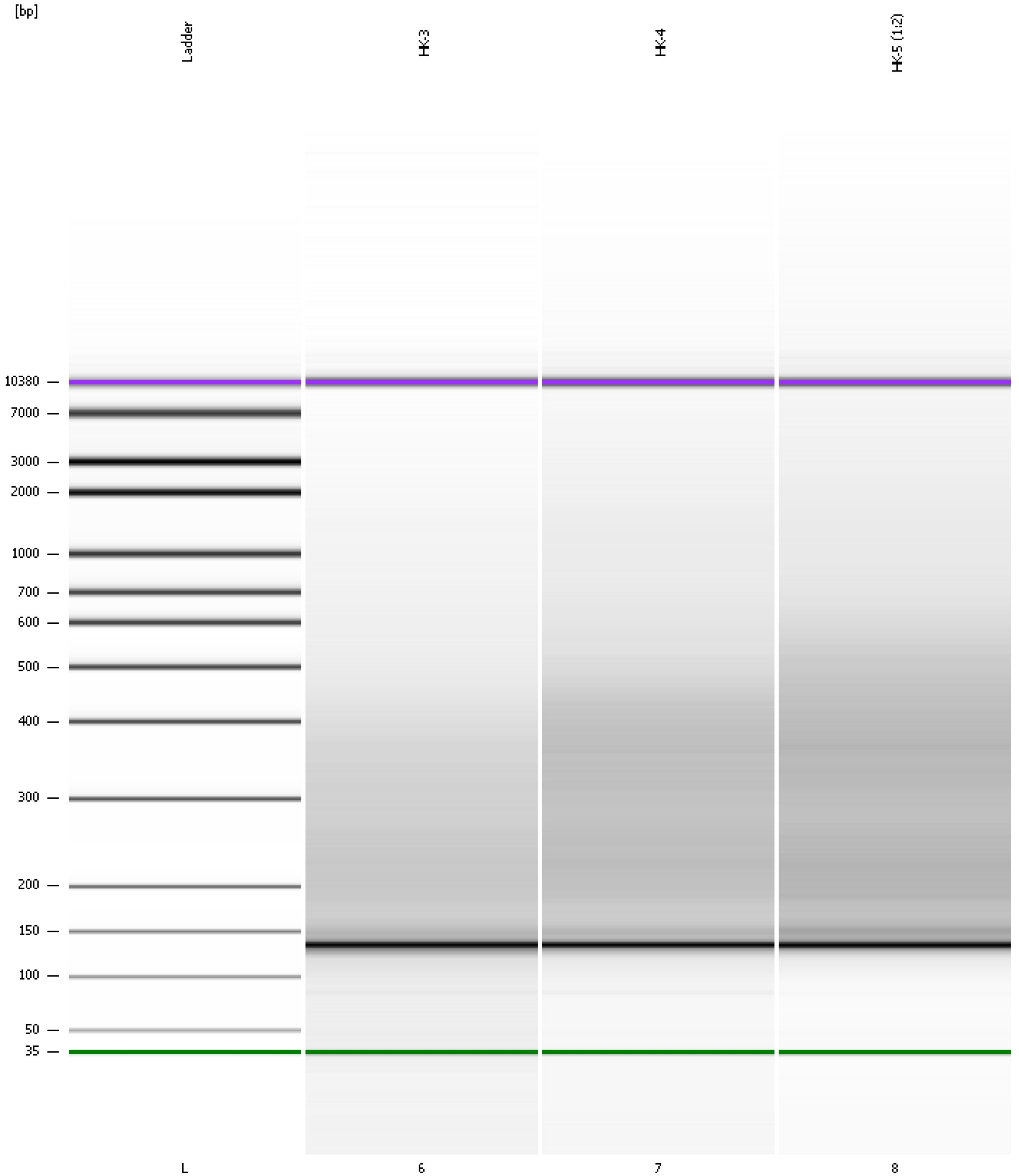
Region table for sample 8 : HK-5 (1:2)

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 88 | 5,873 | 487 | 1,788.3 | 20,649.7 | 3,225.31 | 97 | 100.0 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
Modified: 6/13/2016 4:13:59 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...\2100 expert\data\2016-06-13\2016-06-13_001_HK3_HK4_HK5.xad

Created: 6/13/2016 3:39:51 PM
 Modified: 6/13/2016 4:13:59 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|--|--------|------------|----------|--------------|----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 9) | | Instrument | Run | | 6/13/2016 4:12:34 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\2016-06-13\2016-06-13_001.xad) | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 6/13/2016 3:39:57 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |