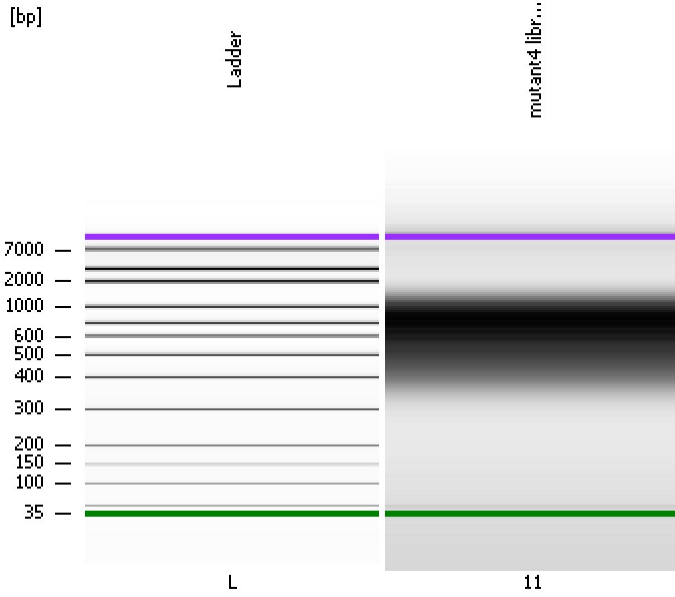


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad

Created: 3/14/2016 3:44:01 PM
Modified: 3/14/2016 4:58:27 PM

Electrophoresis File Run Summary



Instrument Information:

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

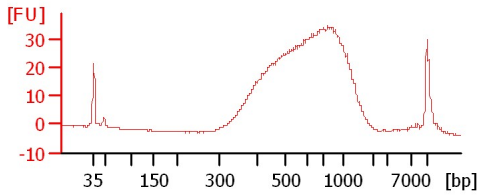
Assay Information:

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:

mutant4 library (1:40)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad

Created: 3/14/2016 3:44:01 PM
Modified: 3/14/2016 4:58:27 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|------------------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| mutant4 library (1:40) | | <input type="checkbox"/> | ✓ | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad

Created: 3/14/2016 3:44:01 PM
Modified: 3/14/2016 4:58:27 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

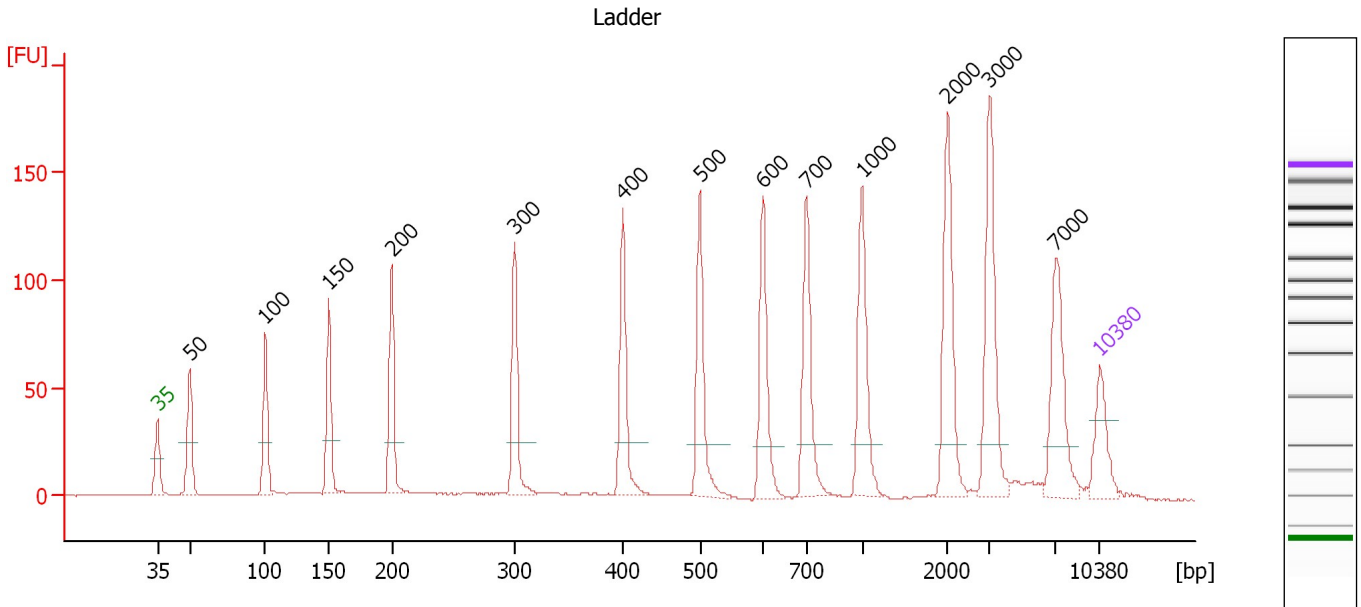
Ladder

| 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:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad

Created: 3/14/2016 3:44:01 PM
 Modified: 3/14/2016 4:58:27 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

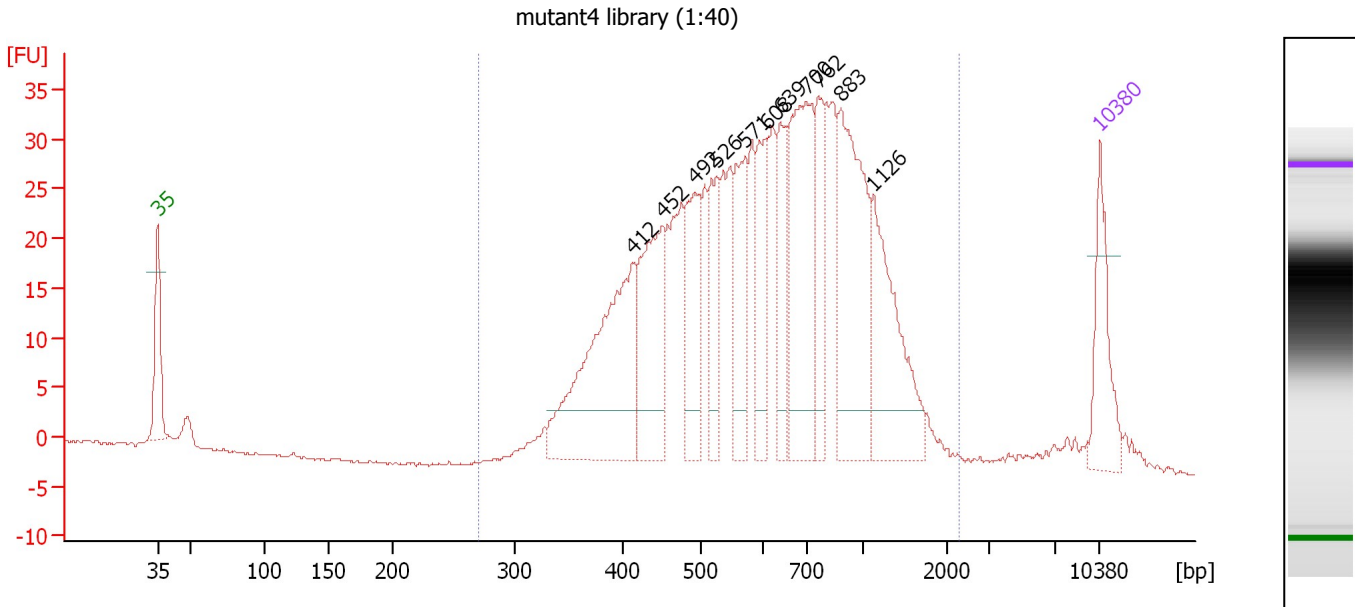
Peak table for Ladder

| 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 | 45.38 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 51.00 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.72 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.40 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 69.53 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 77.57 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 83.28 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 87.96 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 91.20 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 95.33 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.67 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.82 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.72 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad

Created: 3/14/2016 3:44:01 PM
 Modified: 3/14/2016 4:58:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : mutant4 library (1:40)

Number of peaks found: 11 Corr. Area 1: 771.1
 Noise: 0.1

Peak table for sample 11 : mutant4 library (1:40)

| 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 | 412 | 317.94 | 1,169.5 | | 78.25 |
| 3 | 452 | 182.07 | 610.9 | | 80.52 |
| 4 | 492 | 114.81 | 353.4 | | 82.83 |
| 5 | 526 | 90.07 | 259.5 | | 84.50 |
| 6 | 571 | 110.98 | 294.4 | | 86.61 |
| 7 | 608 | 97.76 | 243.6 | | 88.22 |
| 8 | 639 | 80.08 | 189.8 | | 89.23 |
| 9 | 700 | 236.54 | 512.0 | | 91.19 |
| 10 | 762 | 89.60 | 178.2 | | 92.05 |
| 11 | 883 | 232.12 | 398.5 | | 93.71 |
| 12 | 1,126 | 167.90 | 225.9 | | 96.13 |
| 13 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

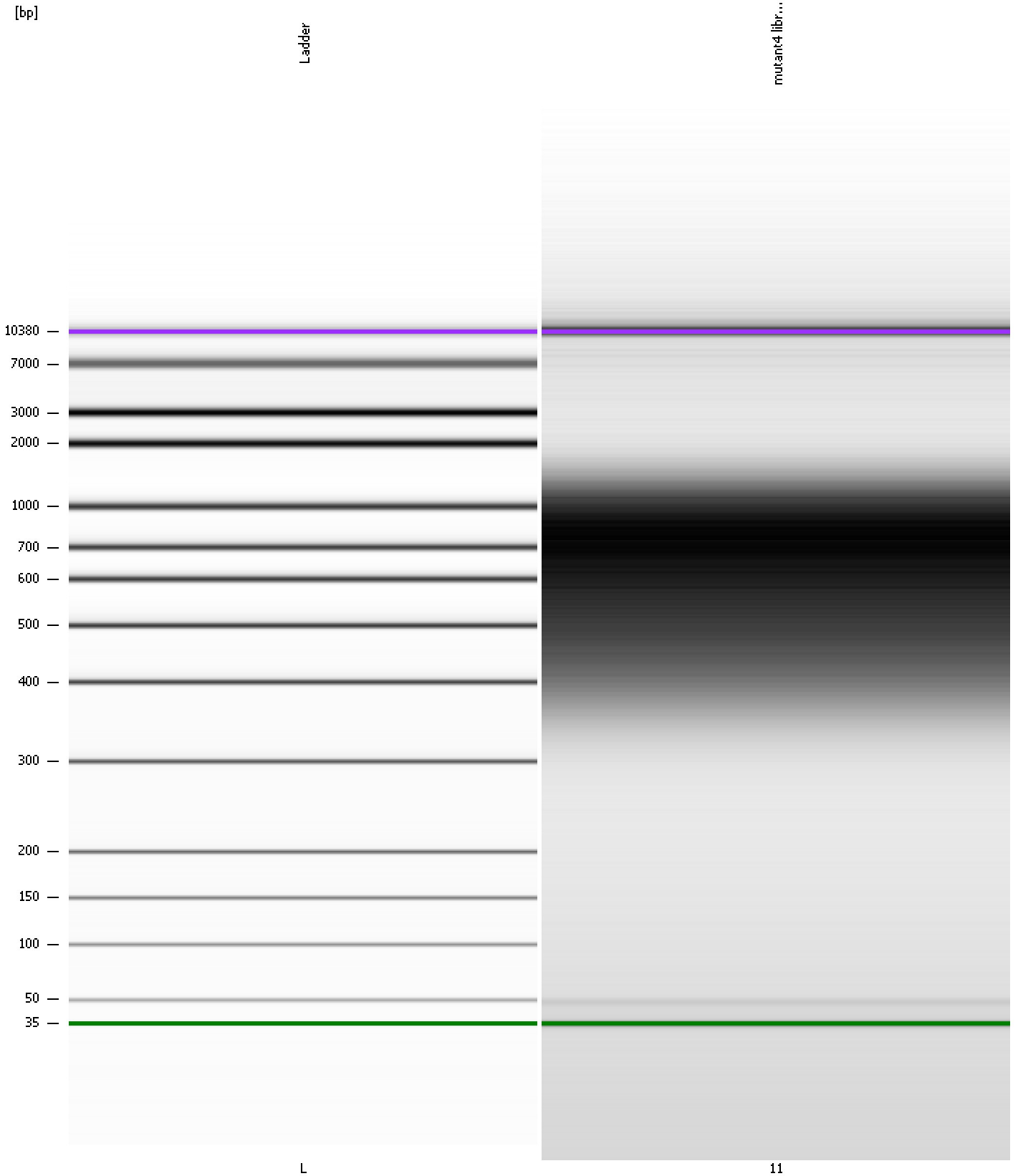
Region table for sample 11 : mutant4 library (1:40)

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 271 | 2,262 | 701 | 771.1 | 6,403.7 | 2,437.65 | 95 | 44.6 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad

Created: 3/14/2016 3:44:01 PM
Modified: 3/14/2016 4:58:27 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 3/14/2016 3:44:01 PM
 Data Path: C:\...0 expert\data\2016-03-14\2016-03-14_001_Mutant4_Library.xad Modified: 3/14/2016 4:58:27 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 | | 3/14/2016 4:25:18 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\2016-03-14\2016-03-14_001.xad) | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 3/14/2016 3:44:07 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |