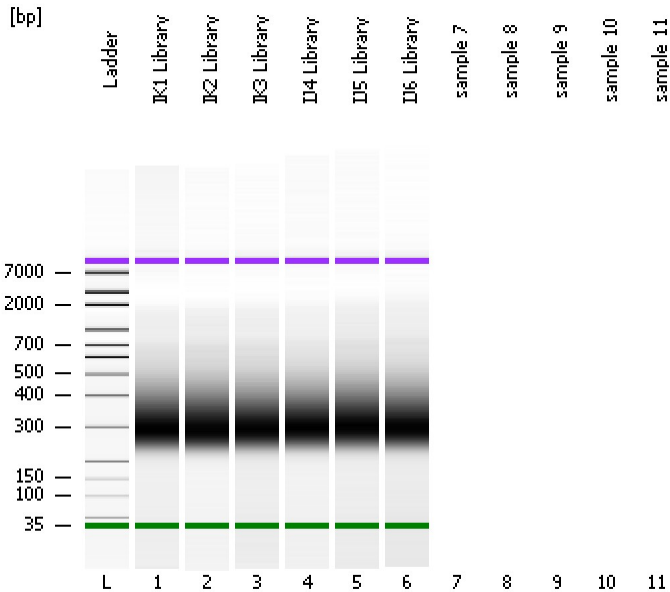


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
Modified: 4/27/2016 4:59:58 PM

Electrophoresis File Run Summary



Instrument Information:

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

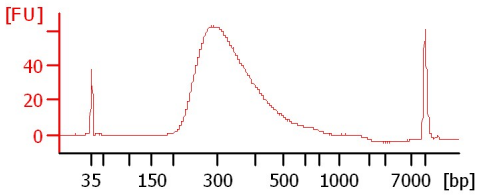
Assay Information:

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

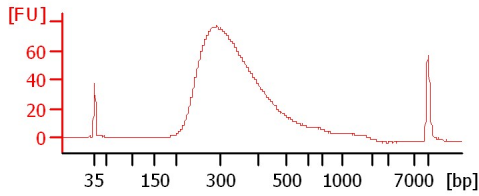
Chip Information:

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

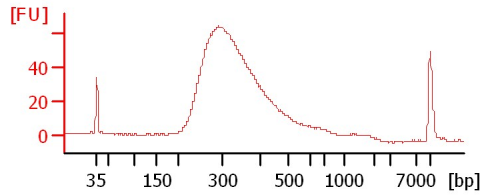
IK1 Library



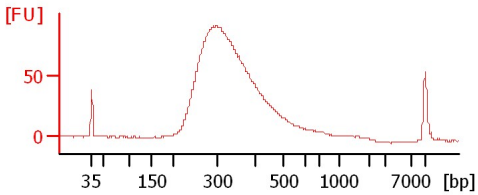
IK2 Library



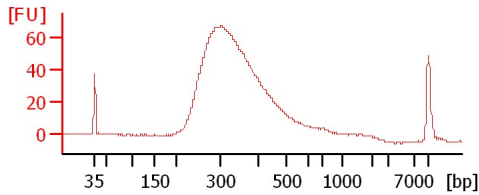
IK3 Library



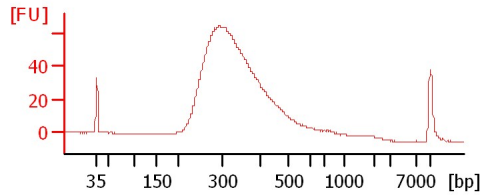
IK4 Library



IK5 Library



IK6 Library



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
IK1 Library		<input type="checkbox"/>	✓			
IK2 Library		<input type="checkbox"/>	✓			
IK3 Library		<input type="checkbox"/>	✓			
IJ4 Library		<input type="checkbox"/>	✓			
IJ5 Library		<input type="checkbox"/>	✓			
IJ6 Library		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
Modified: 4/27/2016 4:59:58 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

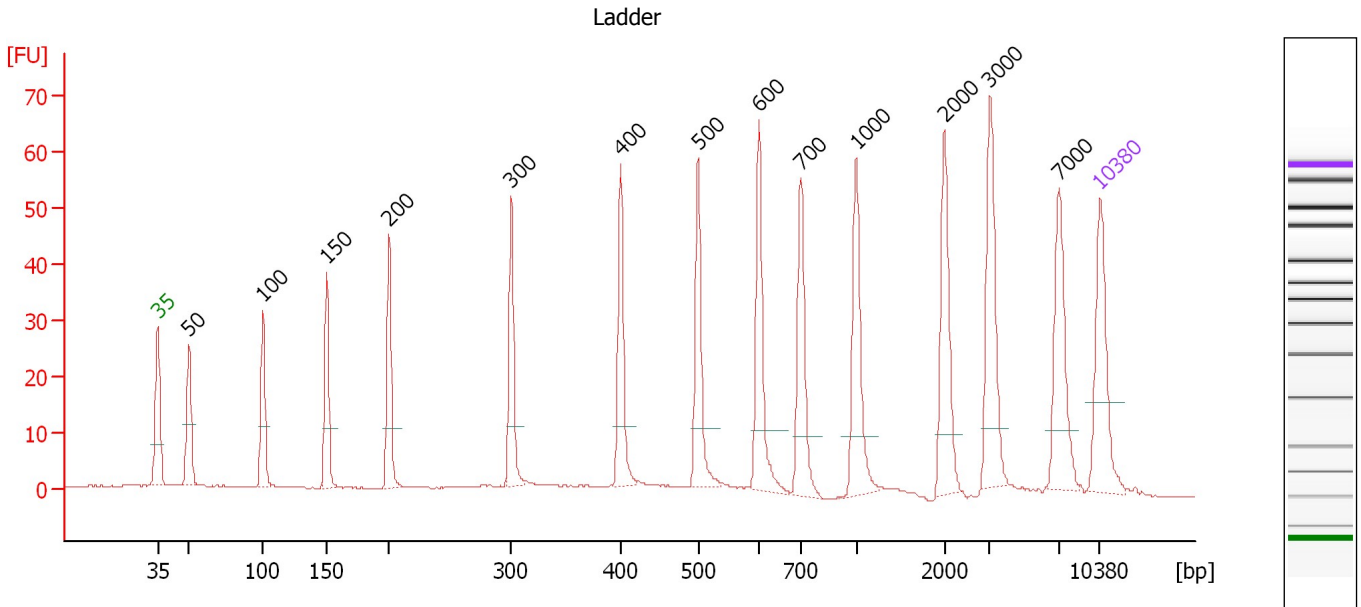
Ladder

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\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

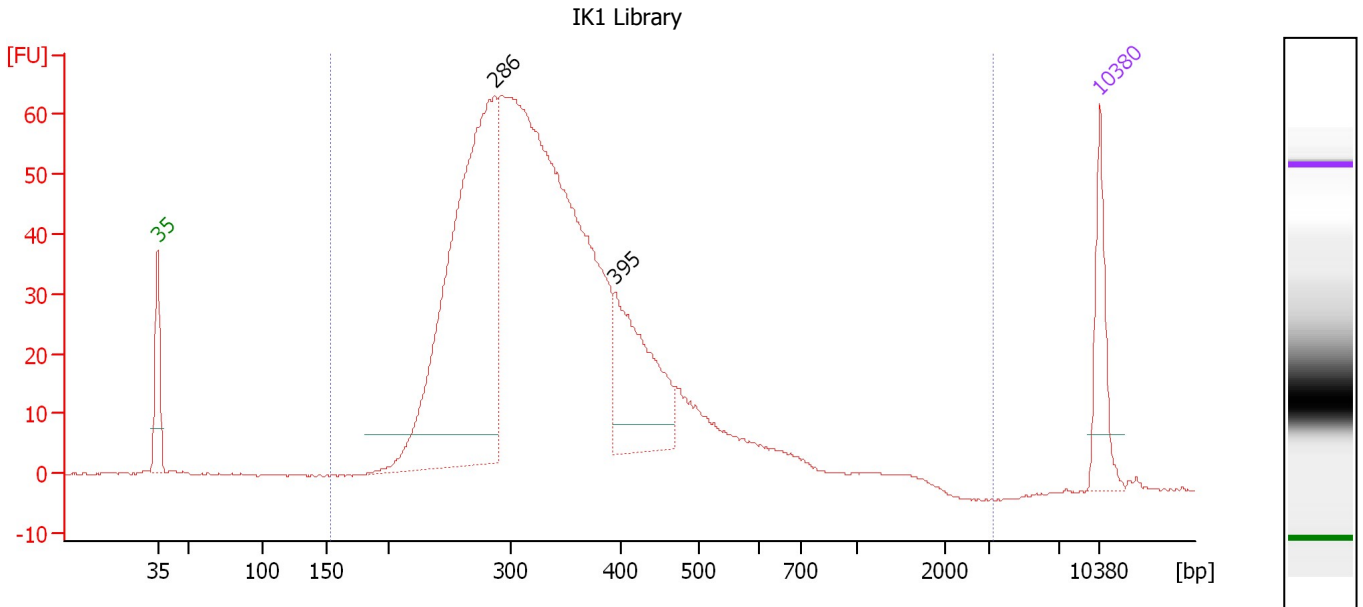
Peak table for Ladder

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	45.34
3	100	150.00	2,272.7	Ladder Peak	50.86
4	150	150.00	1,515.2	Ladder Peak	55.54
5	200	150.00	1,136.4	Ladder Peak	60.21
6	300	150.00	757.6	Ladder Peak	69.27
7	400	150.00	568.2	Ladder Peak	77.43
8	500	150.00	454.5	Ladder Peak	83.15
9	600	150.00	378.8	Ladder Peak	87.68
10	700	150.00	324.7	Ladder Peak	90.76
11	1,000	150.00	227.3	Ladder Peak	94.89
12	2,000	150.00	113.6	Ladder Peak	101.46
13	3,000	150.00	75.8	Ladder Peak	104.79
14	7,000	150.00	32.5	Ladder Peak	109.97
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : IK1 Library

Number of peaks found: 2 Corr. Area 1: 1,215.1
 Noise: 0.1

Peak table for sample 1 : IK1 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	286	903.59	4,779.2		68.04
3	395	235.70	904.8		76.99
4	10,380	75.00	10.9	Upper Marker	113.00

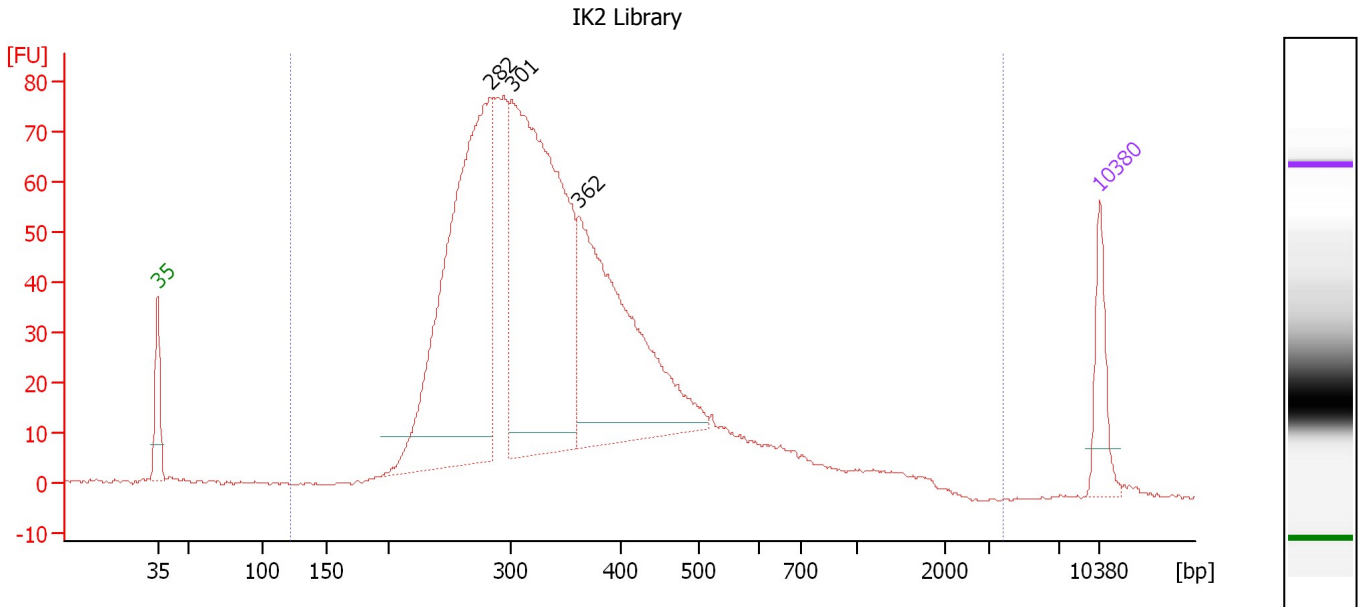
Region table for sample 1 : IK1 Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
154	3,185	349	1,215.1	13,688.5	2,879.30	99	33.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : IK2 Library

Number of peaks found: 3 Corr. Area 1: 1,594.8
 Noise: 0.3

Peak table for sample 2 : IK2 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	282	1,056.38	5,668.1		67.67
3	301	1,091.59	5,498.9		69.33
4	362	650.84	2,726.0		74.31
5	10,380	75.00	10.9	Upper Marker	113.00

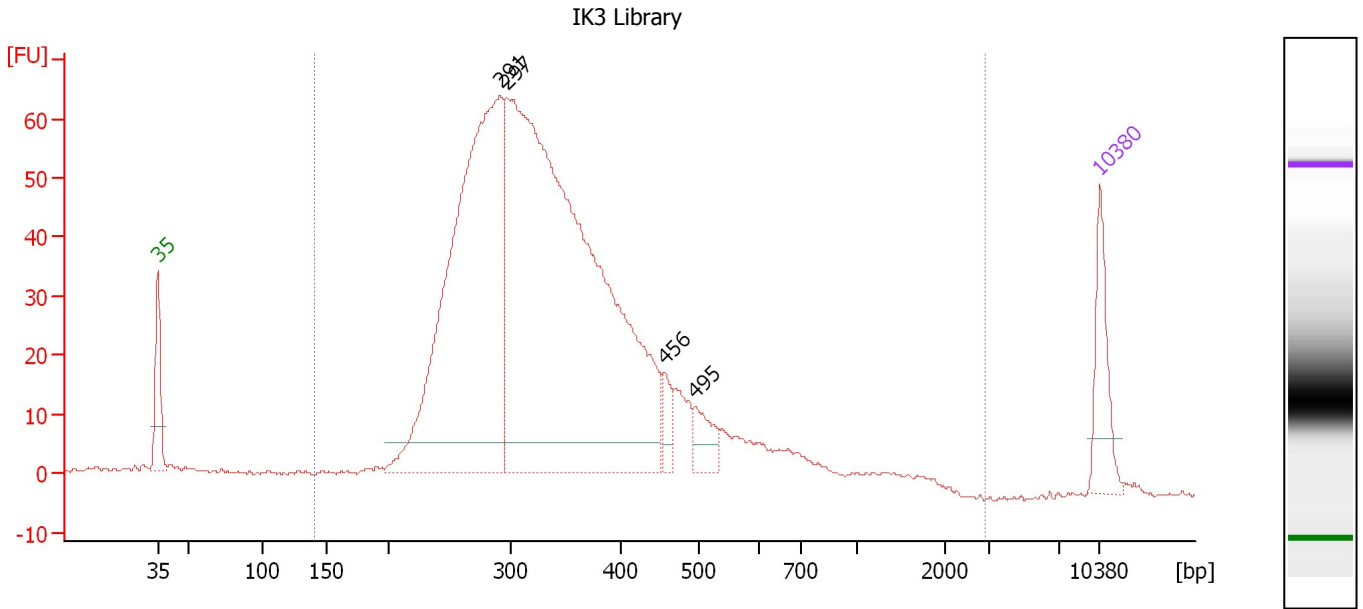
Region table for sample 2 : IK2 Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
122	3,787	372	1,594.8	18,047.8	3,832.00	99	48.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : IK3 Library

Number of peaks found: 4 Corr. Area 1: 1,259.0
 Noise: 0.4

Peak table for sample 3 : IK3 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	291	1,098.22	5,719.9		68.45
3	297	1,799.57	9,195.8		68.95
4	456	37.10	123.4		80.61
5	495	49.80	152.3		82.89
6	10,380	75.00	10.9	Upper Marker	113.00

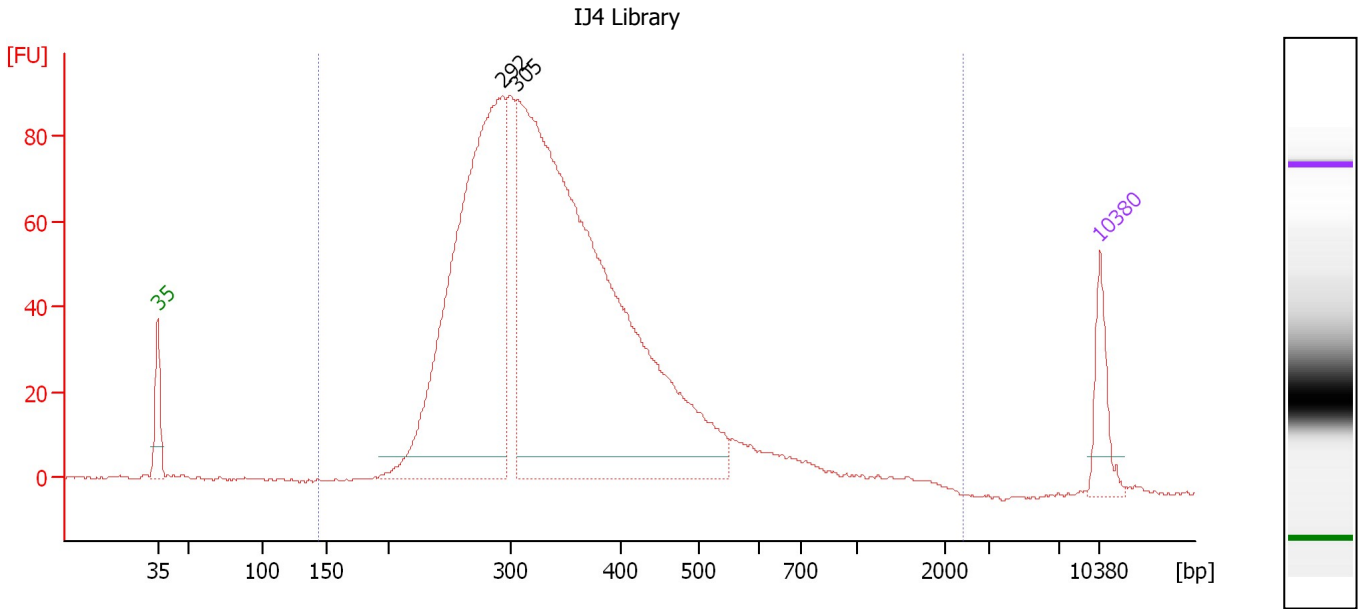
Region table for sample 3 : IK3 Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
141	2,910	363	1,259.0	15,265.9	3,218.84	97	45.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : IJ4 Library

Number of peaks found: 2 Corr. Area 1: 1,733.5
 Noise: 0.4

Peak table for sample 4 : IJ4 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	292	1,344.85	6,968.6		68.58
3	305	2,313.98	11,478.3		69.71
4	10,380	75.00	10.9	Upper Marker	113.00

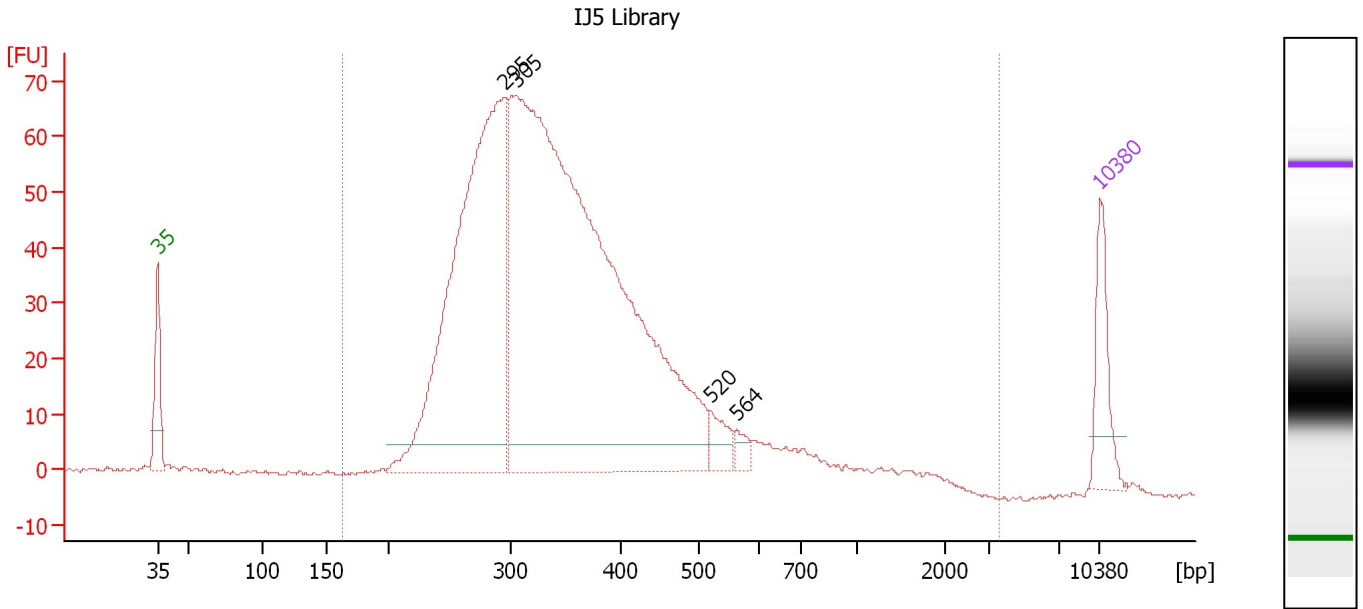
Region table for sample 4 : IJ4 Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
144	2,396	363	1,733.5	18,568.0	3,957.58	99	43.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : IJ5 Library

Number of peaks found: 4 Corr. Area 1: 1,328.8
 Noise: 0.4

Peak table for sample 5 : IJ5 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	295	1,060.89	5,448.0		68.82
3	305	2,049.39	10,189.9		69.65
4	520	40.44	117.9		84.05
5	564	18.59	50.0		86.03
6	10,380	75.00	10.9	Upper Marker	113.00

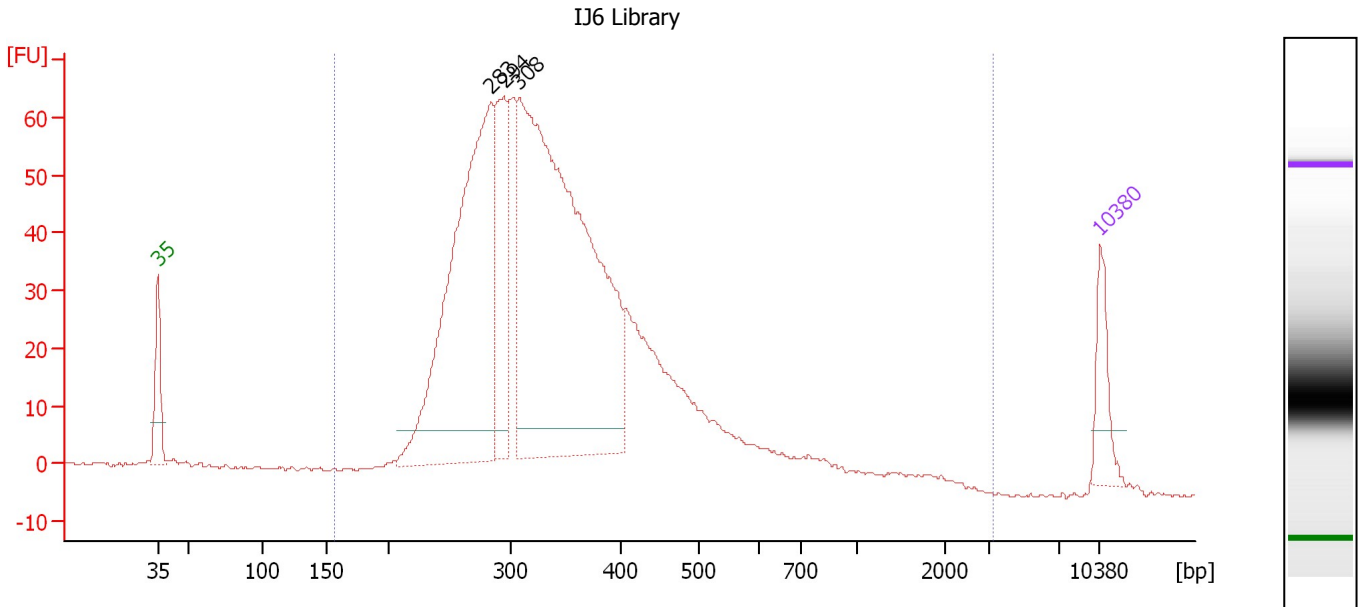
Region table for sample 5 : IJ5 Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
163	3,556	369	1,328.8	14,809.4	3,202.35	100	44.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : IJ6 Library

Number of peaks found: 3 Corr. Area 1: 1,237.0
 Noise: 0.3

Peak table for sample 6 : IJ6 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	283	1,053.52	5,630.6		67.77
3	294	276.40	1,424.6		68.72
4	308	1,591.90	7,843.2		69.88
5	10,380	75.00	10.9	Upper Marker	113.00

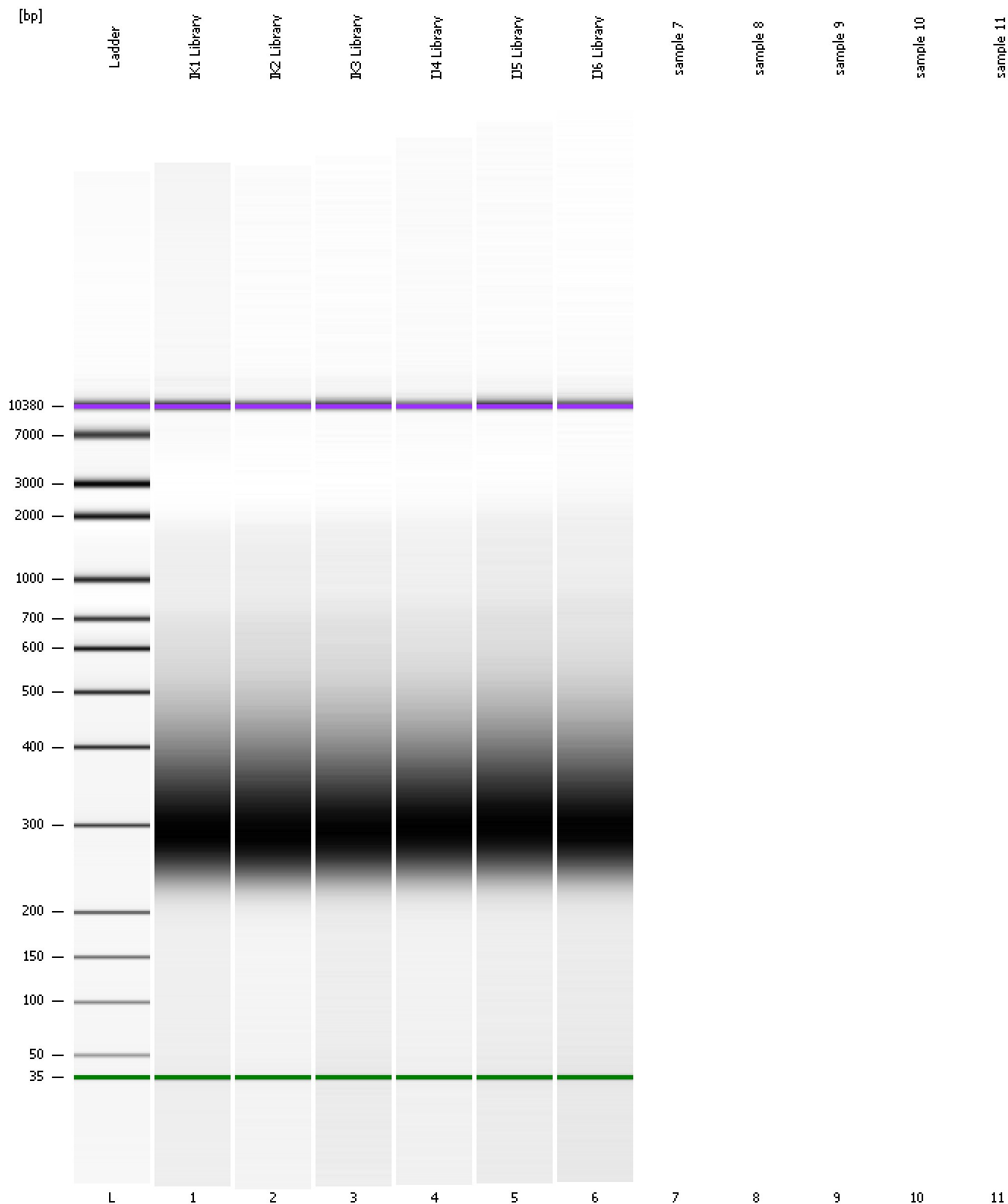
Region table for sample 6 : IJ6 Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
157	3,172	366	1,237.0	18,211.8	3,894.62	99	47.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
Modified: 4/27/2016 4:59:58 PM

Gel Image

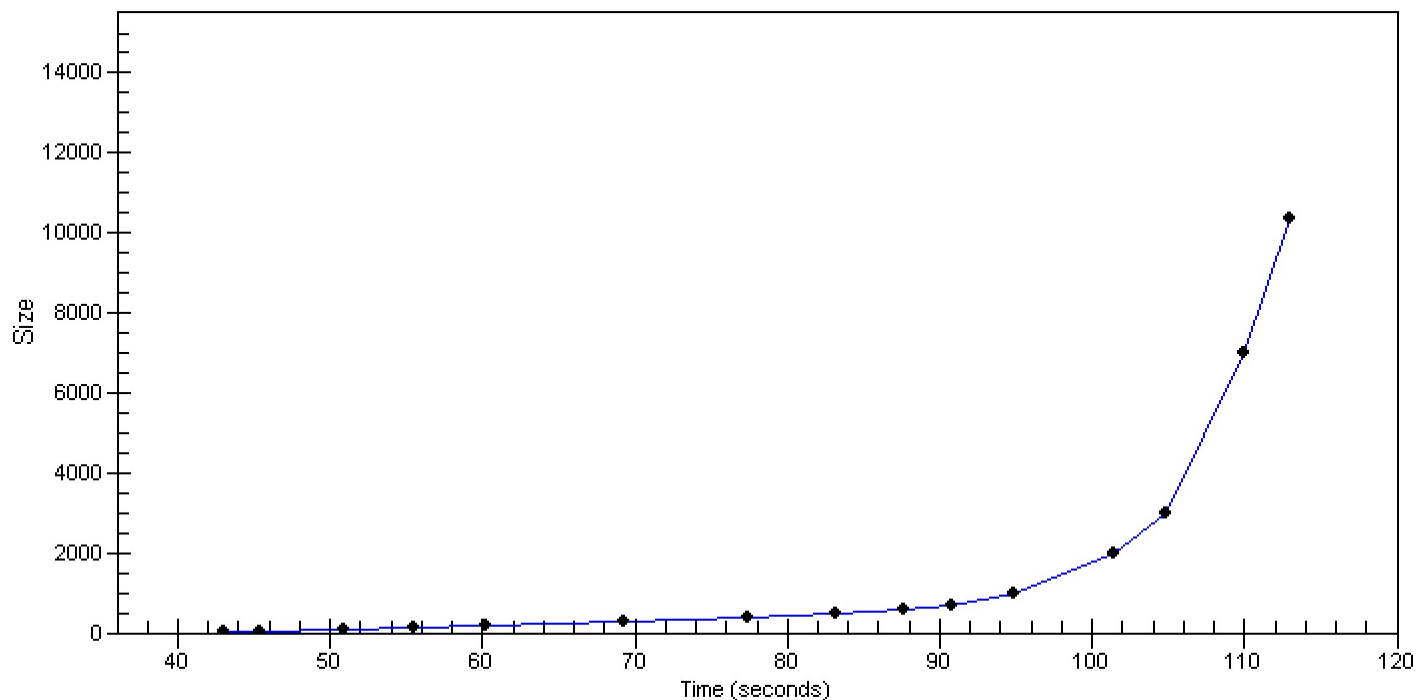


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
Modified: 4/27/2016 4:59:58 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
Modified: 4/27/2016 4:59:58 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\2016-04-27\2016-04-27_004.xad

Created: 4/27/2016 4:32:33 PM
 Modified: 4/27/2016 4:59:58 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		4/27/2016 4:59:34 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\2016-04-27\2016-04-27_004.xad)		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/27/2016 4:32:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1