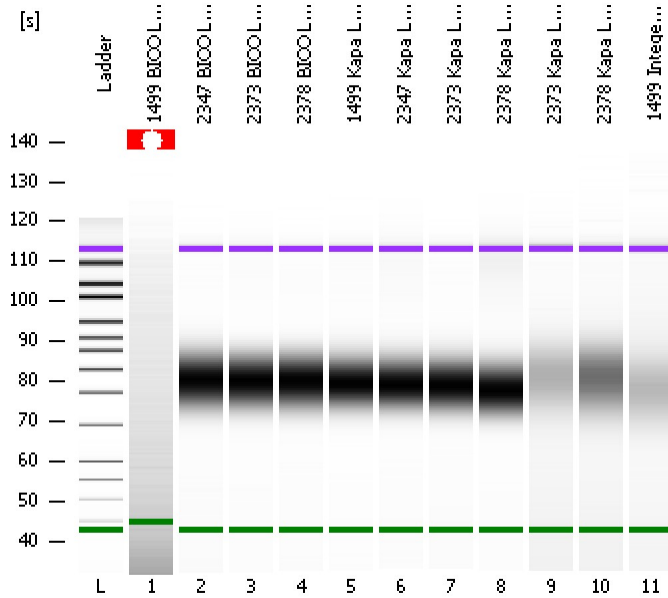


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 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

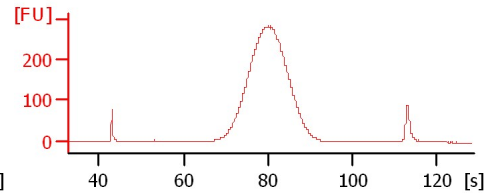
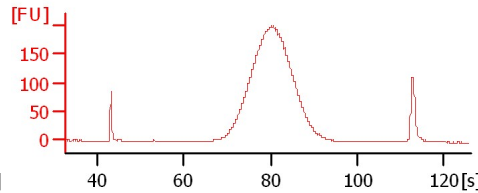
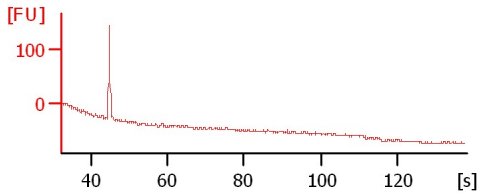
Chip Information:

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

1499 BIOC Lib 1:3 (Phusion MM)

2347 BIOC Lib 1:10 (Phusion MM)

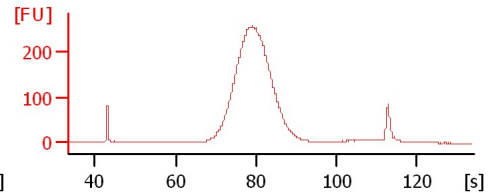
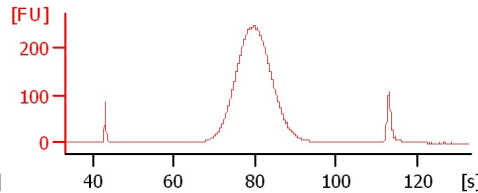
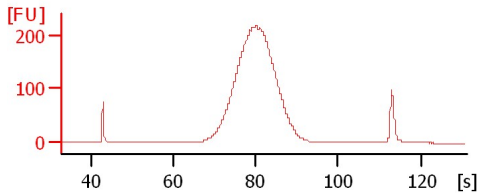
2373 BIOC Lib 1:10 (Phusion MM)



2378 BIOC Lib 1:10 (Phusion MM)

1499 Kapa Lib 1:15 (Phusion MM)

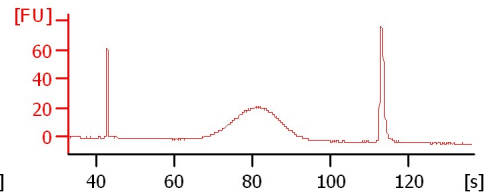
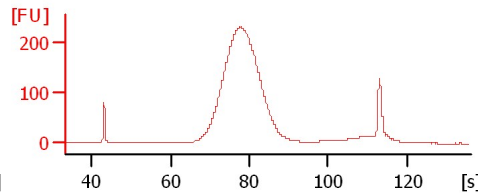
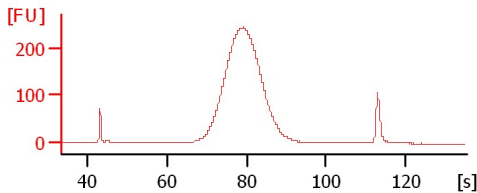
2347 Kapa Lib 1:12 (Phusion MM)



2373 Kapa Lib 1:10 (Phusion MM)

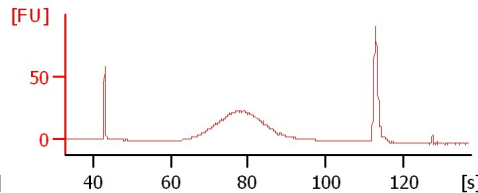
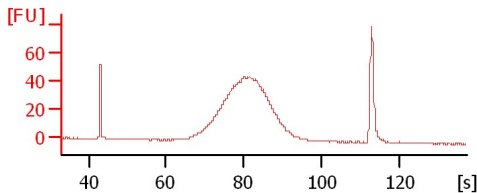
2378 Kapa Lib 1:10 (Phusion MM)

2373 Kapa Ligation



2378 Kapa Ligation

1499 IntegenX Ligation



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
Modified: 5/24/2013 10:52:51 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1499 B100 Lib 1:3 (Phusion MM)		<input type="checkbox"/>	✓			
2347 B100 Lib 1:10 (Phusion MM)		<input type="checkbox"/>	✓			
2373 B100 Lib 1:10 (Phusion MM)		<input type="checkbox"/>	✓			
2378 B100 Lib 1:10 (Phusion MM)		<input type="checkbox"/>	✓			
1499 Kapa Lib 1:15 (Phusion MM)		<input type="checkbox"/>	✓			
2347 Kapa Lib 1:12 (Phusion MM)		<input type="checkbox"/>	✓			
2373 Kapa Lib 1:10 (Phusion MM)		<input type="checkbox"/>	✓			
2378 Kapa Lib 1:10 (Phusion MM)		<input type="checkbox"/>	✓			
2373 Kapa Ligation		<input type="checkbox"/>	✓			
2378 Kapa Ligation		<input type="checkbox"/>	✓			
1499 IntegenX Ligation		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
Modified: 5/24/2013 10:52:51 AM

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

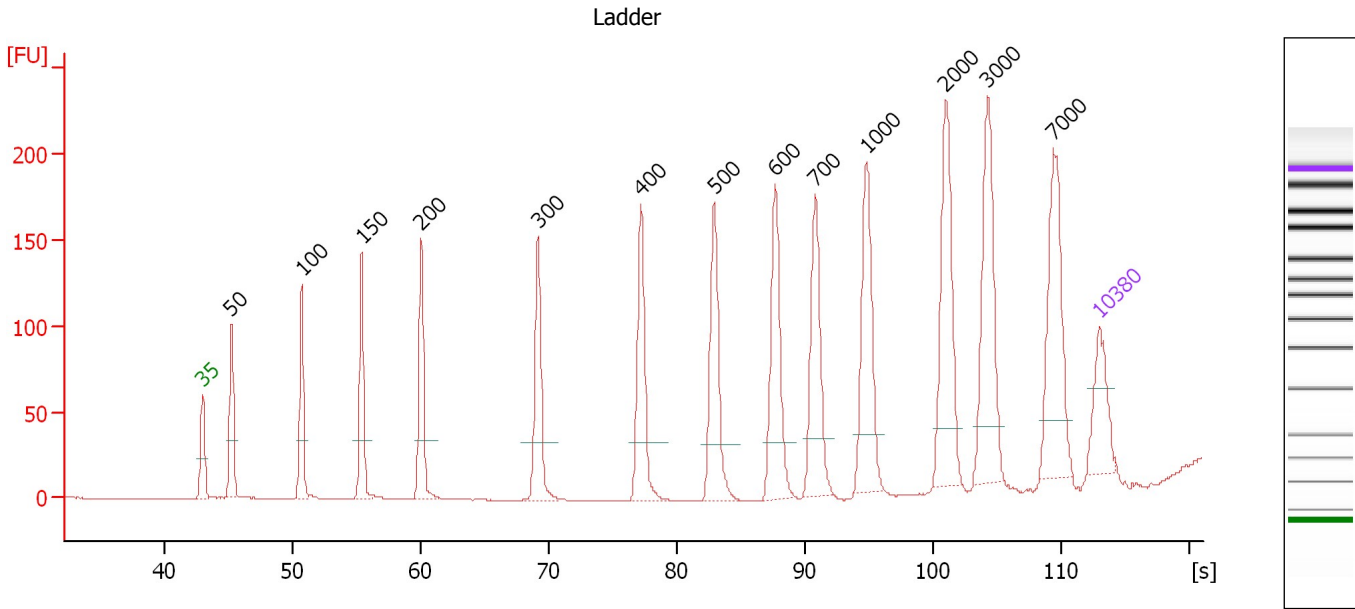
Ladder

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:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

Peak table for Ladder

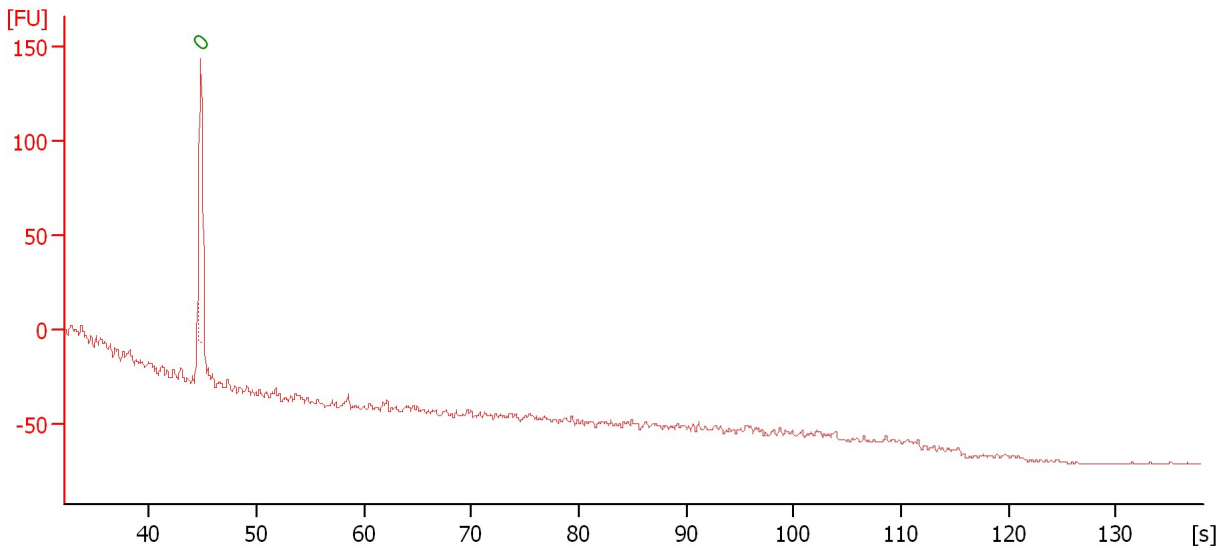
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...

1499 B100 Lib 1:3 (Phusion MM)



Overall Results for sample 1 : 1499 B100 Lib 1:3 (Phusion MM)

Number of peaks found: 0 Noise: 0.5

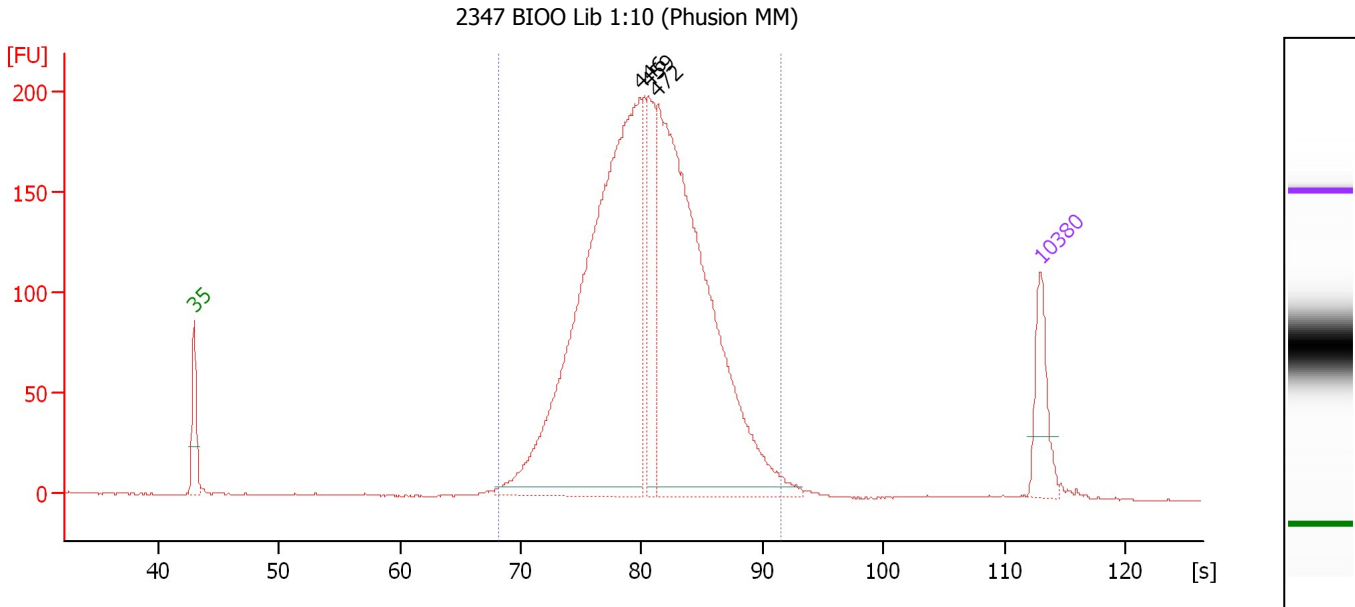
Peak table for sample 1 : 1499 B100 Lib 1:3 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2347 B100 Lib 1:10 (Phusion MM)

Number of peaks found: 3 Corr. Area 1: 2,949.2
 Noise: 0.3

Peak table for sample 2 : 2347 B100 Lib 1:10 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	446	1,262.97	4,287.6	
3	459	183.07	604.6	
4	472	1,099.46	3,529.3	
5	10,380	75.00	10.9	Upper Marker

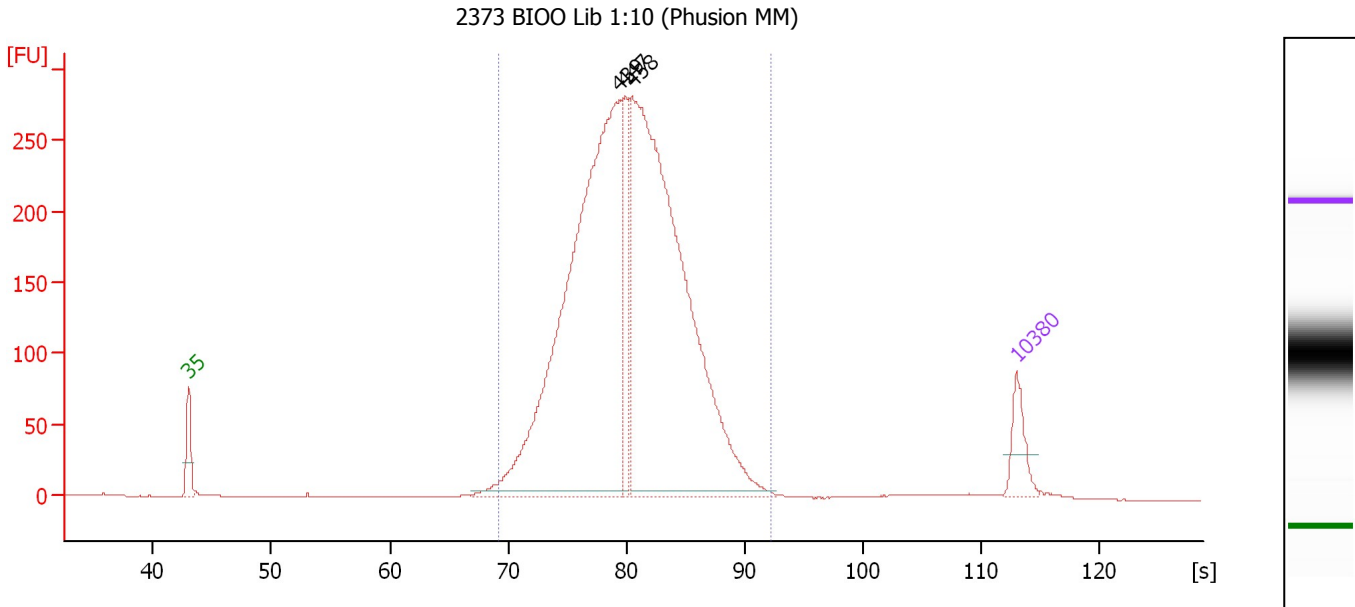
Region table for sample 2 : 2347 B100 Lib 1:10 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
288	758	460	8,994.3	2,634.10	2,949.2	98	16.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 2373 B100 Lib 1:10 (Phusion MM)

Number of peaks found: 3 Corr. Area 1: 4,066.8
 Noise: 0.1

Peak table for sample 3 : 2373 B100 Lib 1:10 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	439	2,077.43	7,175.6	
3	447	238.81	810.2	
4	458	2,117.05	7,007.5	
5	10,380	75.00	10.9	Upper Marker

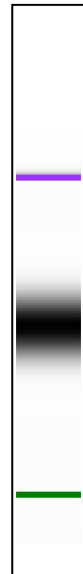
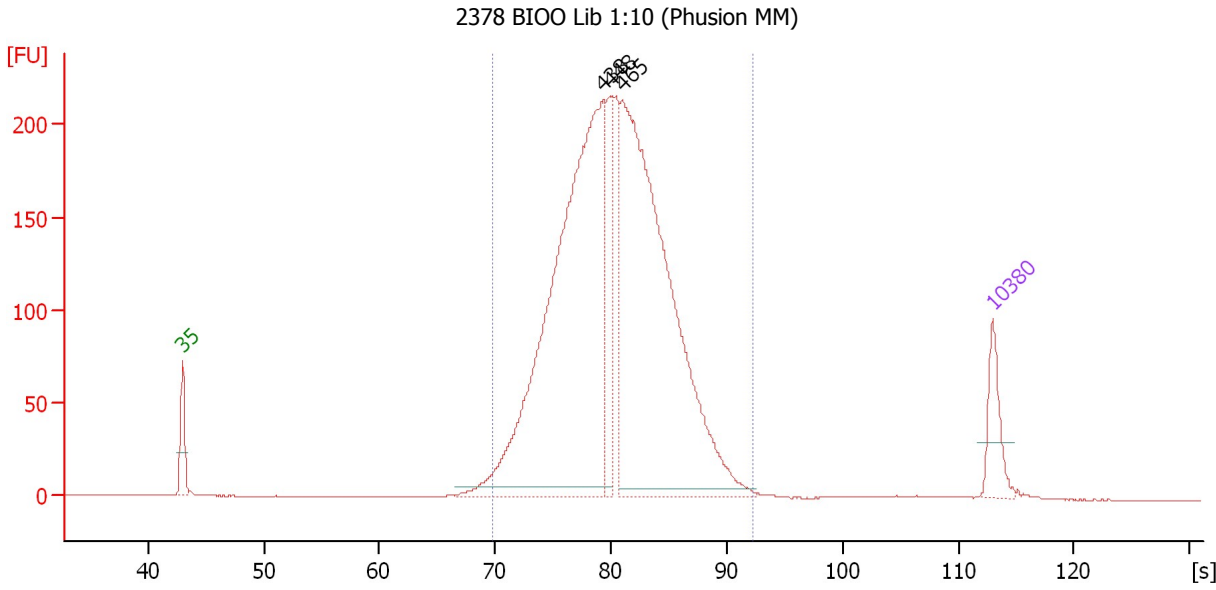
Region table for sample 3 : 2373 B100 Lib 1:10 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
300	808	456	15,400.6	4,484.86	4,066.8	98	16.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 2378 B100 Lib 1:10 (Phusion MM)

Number of peaks found: 3 Corr. Area 1: 3,143.7
 Noise: 0.2

Peak table for sample 4 : 2378 B100 Lib 1:10 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	438	1,528.03	5,290.7	
3	448	208.28	704.2	
4	465	1,455.08	4,738.7	
5	10,380	75.00	10.9	Upper Marker

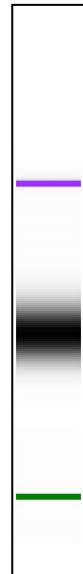
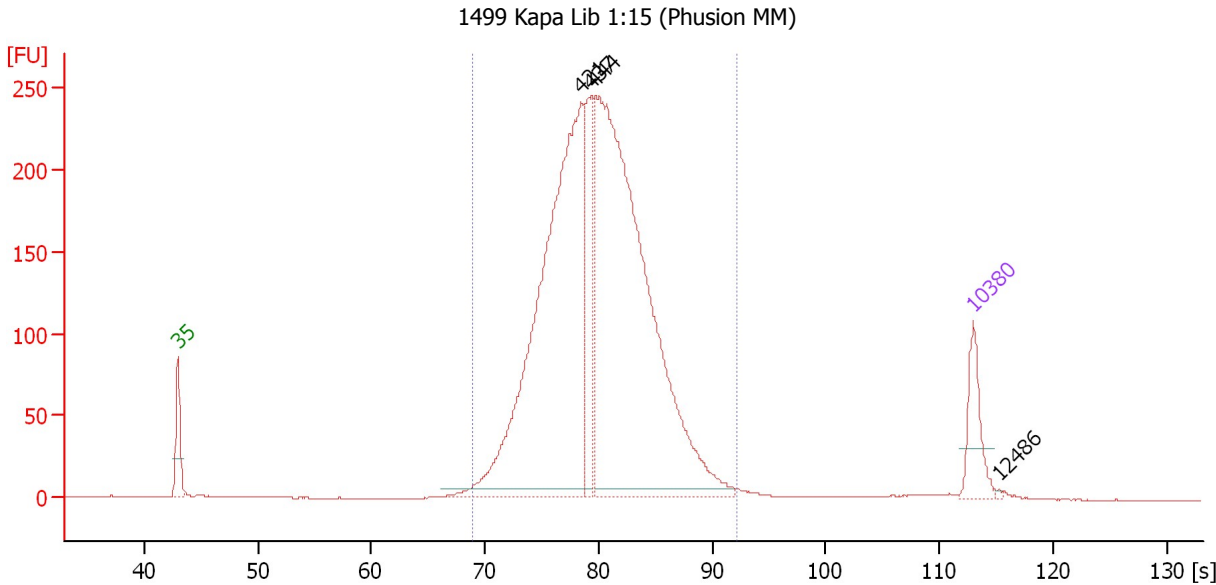
Region table for sample 4 : 2378 B100 Lib 1:10 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
307	811	457	11,516.1	3,357.86	3,143.7	98	16.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 1499 Kapa Lib 1:15 (Phusion MM)

Number of peaks found: 4 Corr. Area 1: 3,356.3
 Noise: 0.2

Peak table for sample 5 : 1499 Kapa Lib 1:15 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	421	1,265.61	4,549.7	
3	437	201.86	699.5	
4	444	1,490.85	5,089.3	
5	10,380	75.00	10.9	Upper Marker
6	12,486	0.00	0.0	

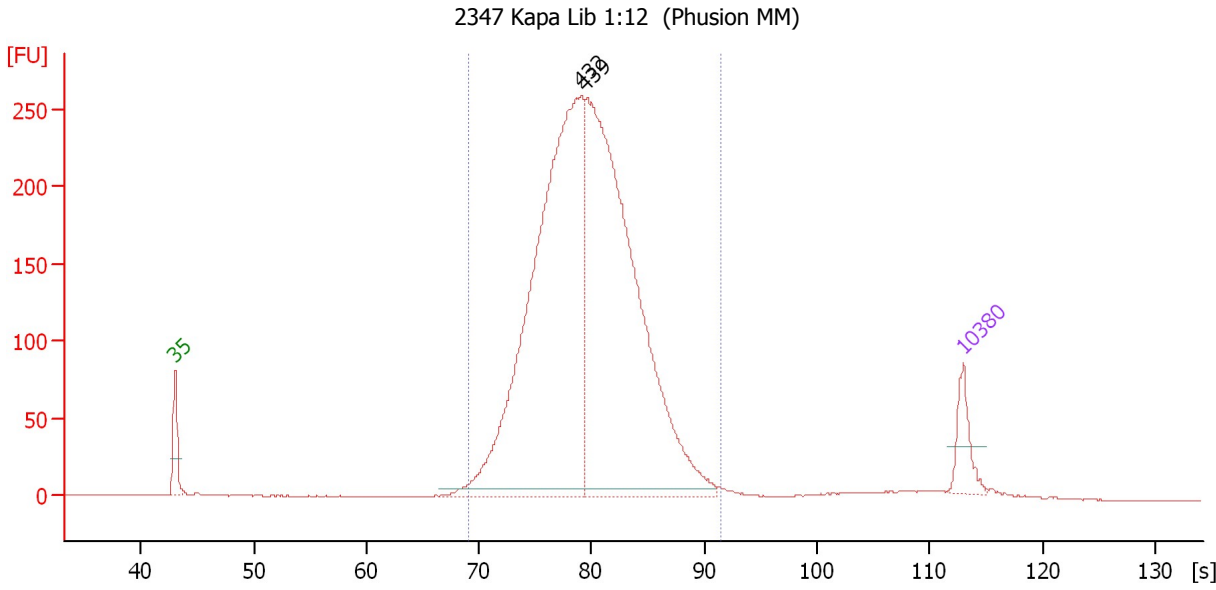
Region table for sample 5 : 1499 Kapa Lib 1:15 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
298	801	451	10,433.1	3,008.27	3,356.3	98	16.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 2347 Kapa Lib 1:12 (Phusion MM)

Number of peaks found: 2 Corr. Area 1: 3,525.9
 Noise: 0.4

Peak table for sample 6 : 2347 Kapa Lib 1:12 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	432	1,976.18	6,931.1	
3	439	1,954.78	6,751.6	
4	10,380	75.00	10.9	Upper Marker

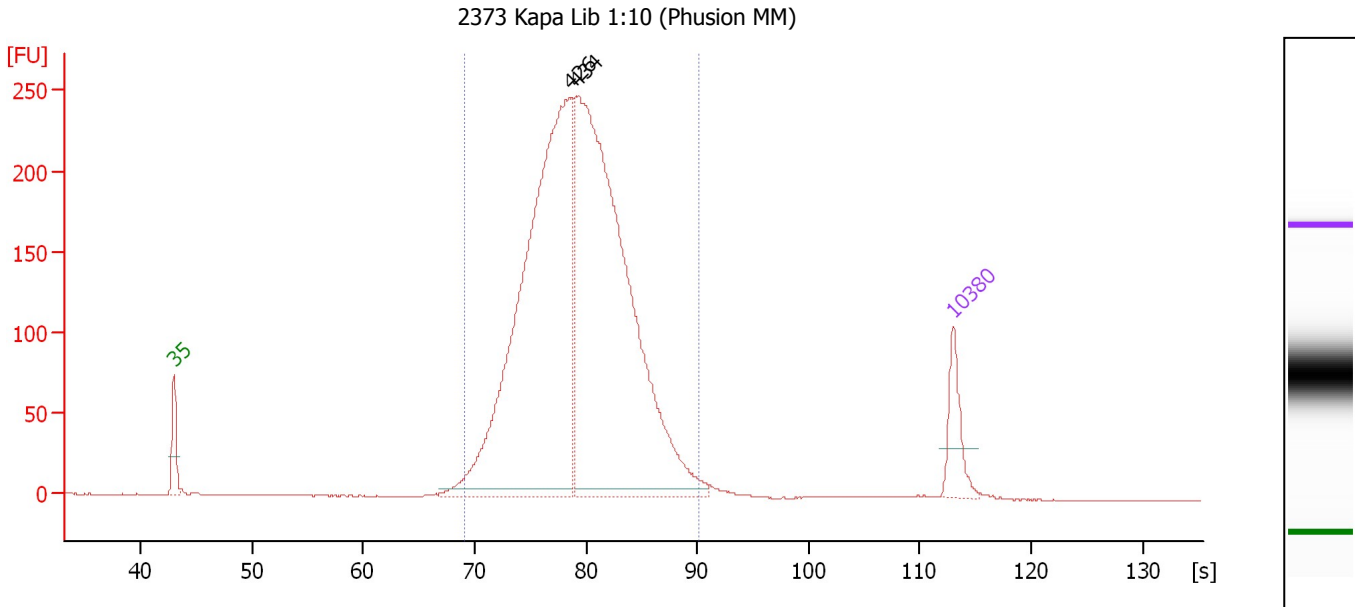
Region table for sample 6 : 2347 Kapa Lib 1:12 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	750	446	13,862.5	3,957.41	3,525.9	96	15.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 2373 Kapa Lib 1:10 (Phusion MM)

Number of peaks found: 2 Corr. Area 1: 3,424.5
 Noise: 0.2

Peak table for sample 7 : 2373 Kapa Lib 1:10 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	426	1,539.33	5,476.6	
3	434	1,637.93	5,713.9	
4	10,380	75.00	10.9	Upper Marker

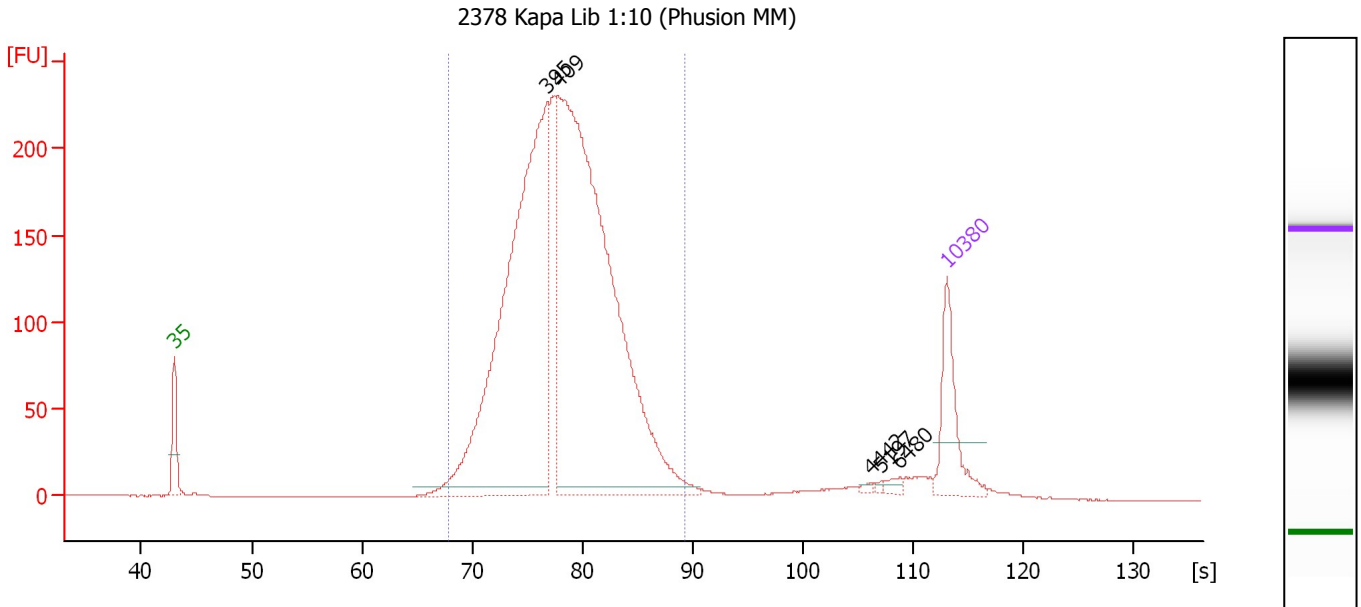
Region table for sample 7 : 2373 Kapa Lib 1:10 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	676	440	11,327.3	3,195.26	3,424.5	98	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 2378 Kapa Lib 1:10 (Phusion MM)

Number of peaks found: 5 Corr. Area 1: 3,240.5
 Noise: 0.1

Peak table for sample 8 : 2378 Kapa Lib 1:10 (Phusion MM)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	395	865.16	3,322.6	
3	409	1,128.32	4,176.5	
4	4,442	3.17	1.1	
5	5,197	2.51	0.7	
6	6,480	6.65	1.6	
7	10,380	75.00	10.9	Upper Marker

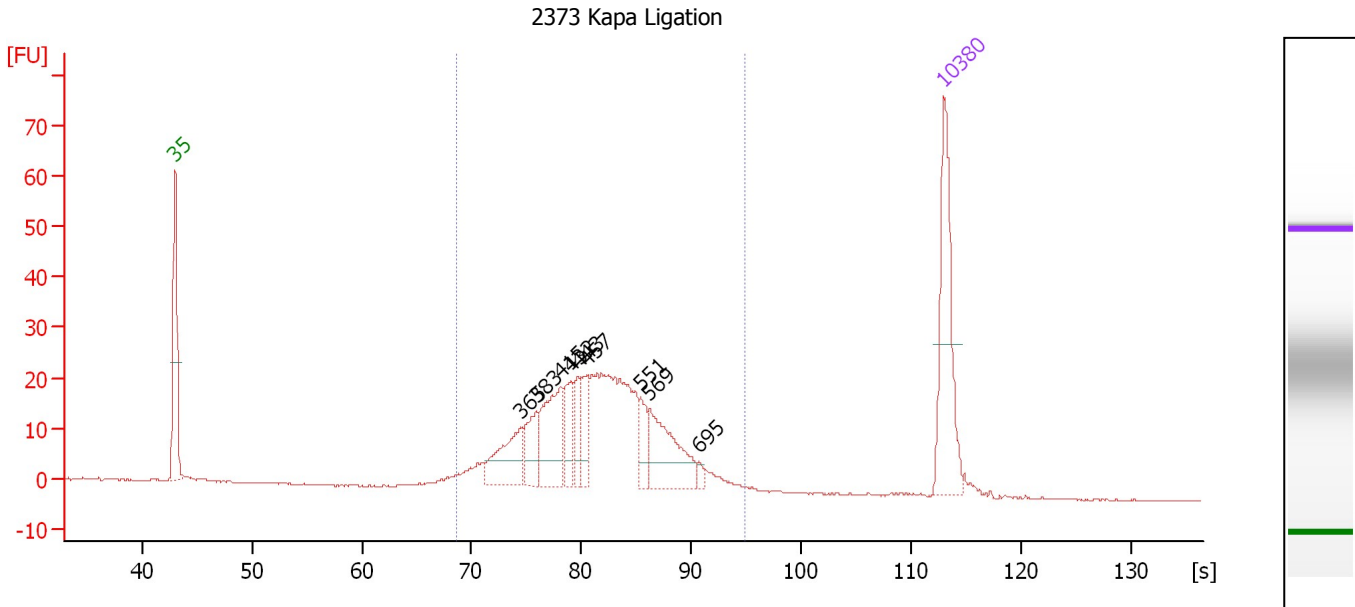
Region table for sample 8 : 2378 Kapa Lib 1:10 (Phusion MM)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
285	652	422	7,910.8	2,141.28	3,240.5	95	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 2373 Kapa Ligation

Number of peaks found: 9 Corr. Area 1: 400.8
 Noise: 0.1

Peak table for sample 9 : 2373 Kapa Ligation

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	48.91	202.9	
3	383	32.18	127.3	
4	415	64.07	233.8	
5	432	27.81	97.4	
6	443	22.18	75.9	
7	457	24.20	80.2	
8	551	18.95	52.1	
9	569	63.09	168.1	
10	695	4.40	9.6	
11	10,380	75.00	10.9	Upper Marker

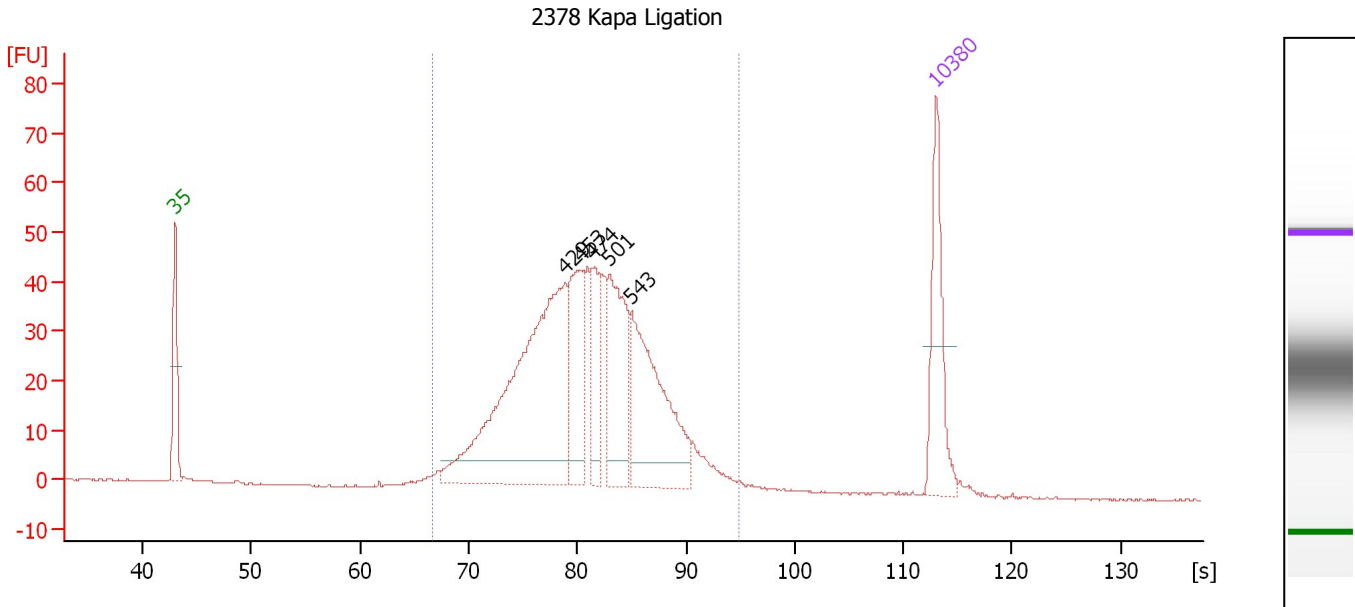
Region table for sample 9 : 2373 Kapa Ligation

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
294	1,000	482	1,693.6	507.84	400.8	96	22.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 2378 Kapa Ligation

Number of peaks found: 5 Corr. Area 1: 796.8
 Noise: 0.1

Peak table for sample 10 : 2378 Kapa Ligation

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	429	402.03	1,420.7	
3	453	106.29	355.5	
4	474	67.37	215.5	
5	501	132.28	400.2	
6	543	183.34	511.5	
7	10,380	75.00	10.9	Upper Marker

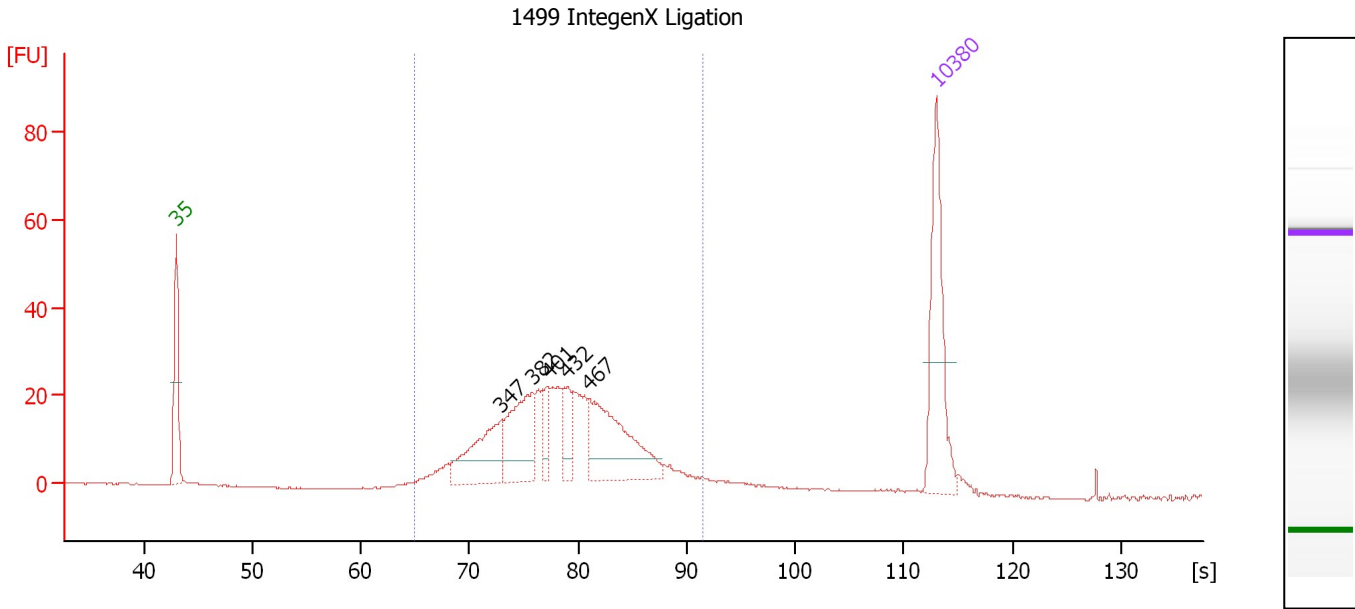
Region table for sample 10 : 2378 Kapa Ligation

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
273	1,000	474	3,600.8	1,056.94	796.8	97	22.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 1499 IntegenX Ligation

Number of peaks found: 5 Corr. Area 1: 429.2
 Noise: 0.1

Peak table for sample 11 : 1499 IntegenX Ligation

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	347	74.57	325.6	
3	382	76.34	302.8	
4	401	19.73	74.6	
5	432	26.44	92.8	
6	467	104.02	337.3	
7	10,380	75.00	10.9	Upper Marker

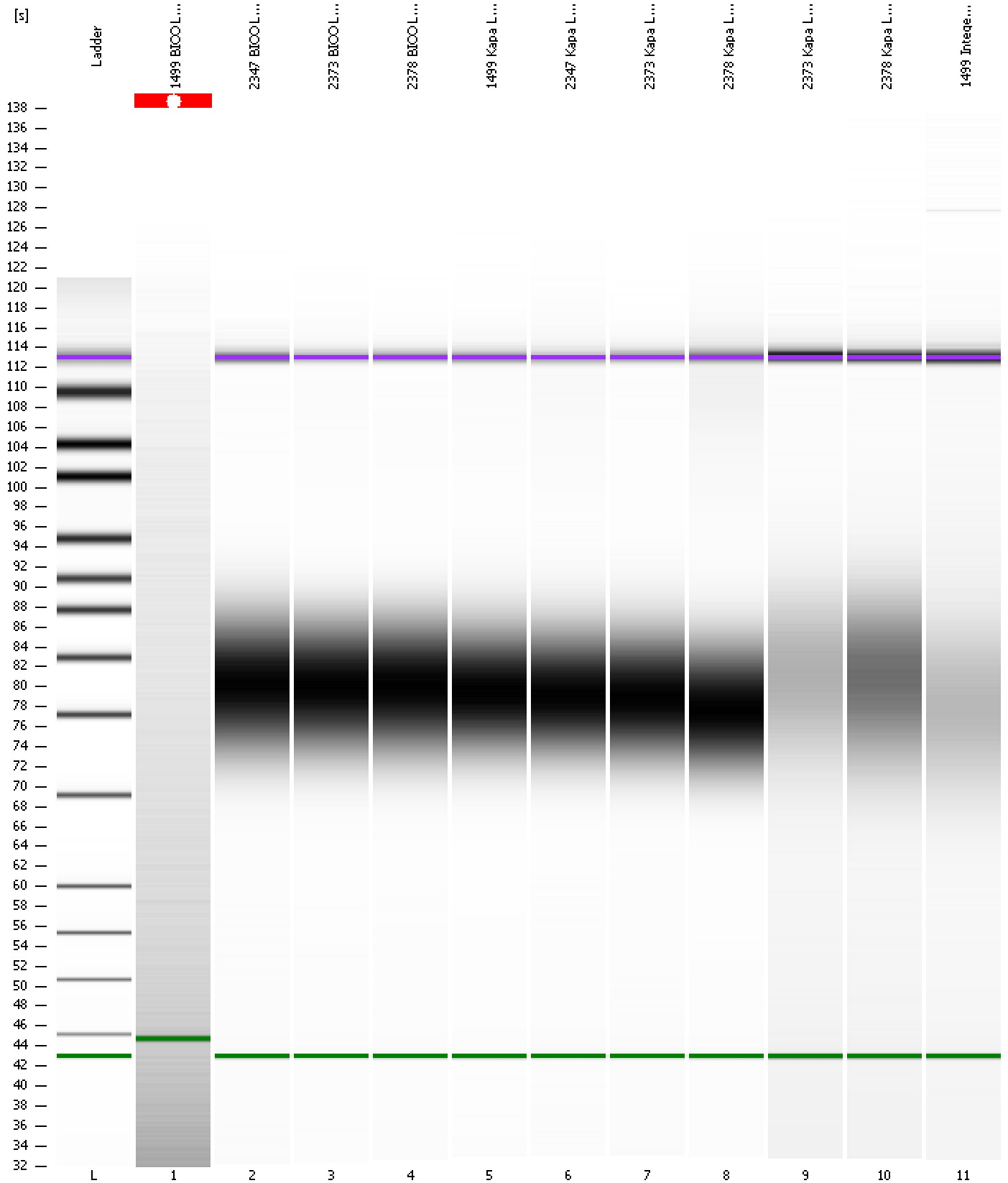
Region table for sample 11 : 1499 IntegenX Ligation

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
255	752	430	1,795.5	480.21	429.2	95	20.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
Modified: 5/24/2013 10:52:51 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad

Created: 5/24/2013 10:06:38 AM
 Modified: 5/24/2013 10:52:51 AM

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		5/24/2013 10:47:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-24\2013-05-24_002.xad)		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/24/2013 10:06:39 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1