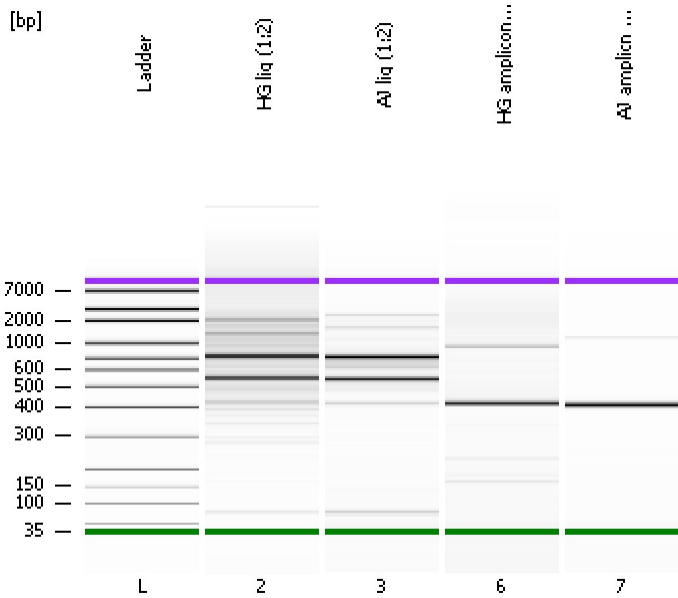


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 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

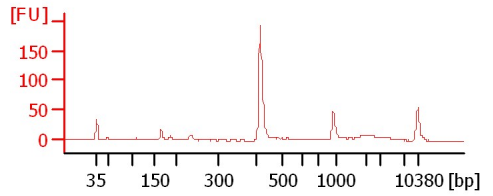
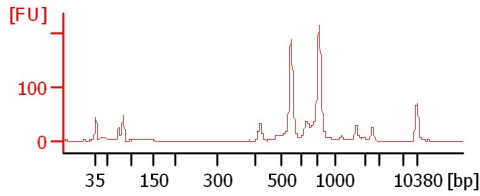
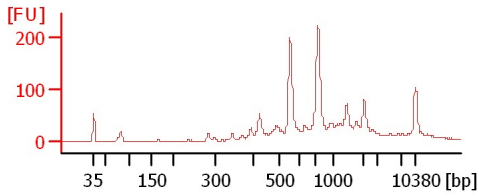
Chip Information:

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

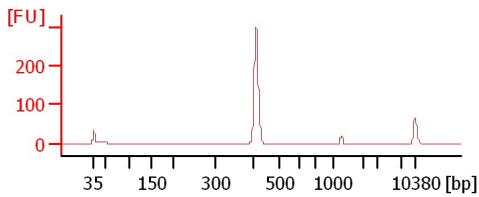
**HG lig (1:2)**

**AJ lig (1:2)**

**HG amplicon QC (1:50)**



**AJ amplicon QC (1:3)**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
Modified: 11/21/2016 5:08:48 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HG lig (1:2)		<input type="checkbox"/>	✓			
AJ lig (1:2)		<input type="checkbox"/>	✓			
HG amplicon QC (1:50)		<input type="checkbox"/>	✓			
AJ amplicon QC (1:3)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

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

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
Modified: 11/21/2016 5:08:48 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

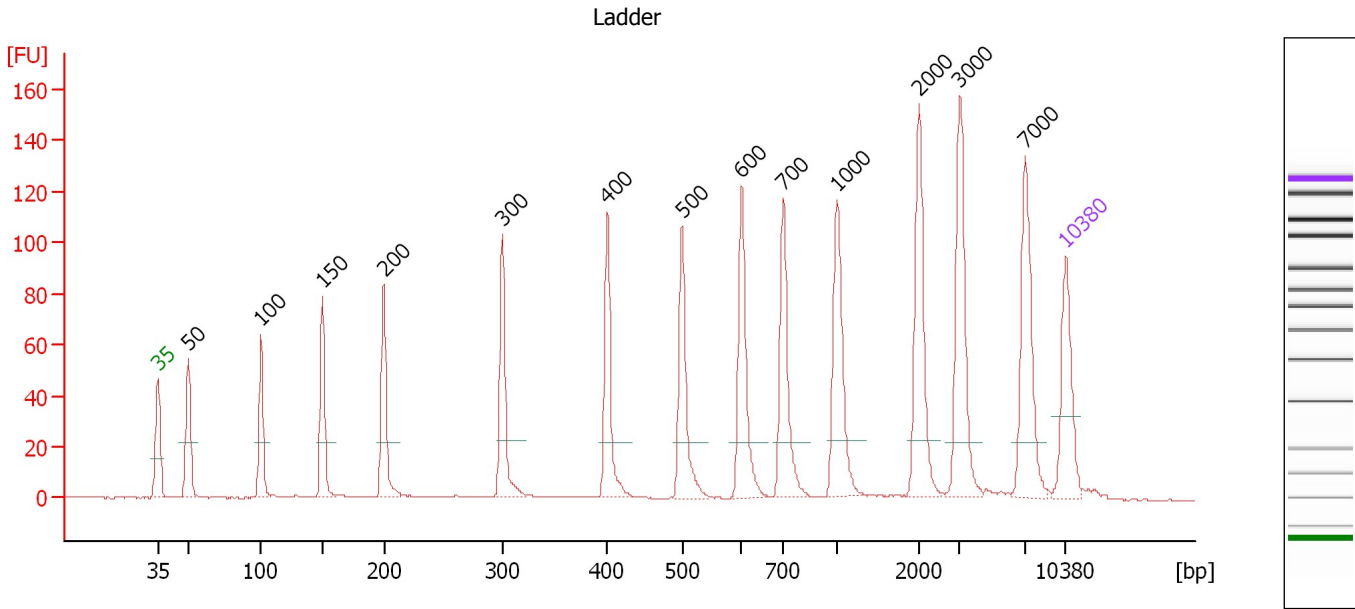
**Ladder**

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:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

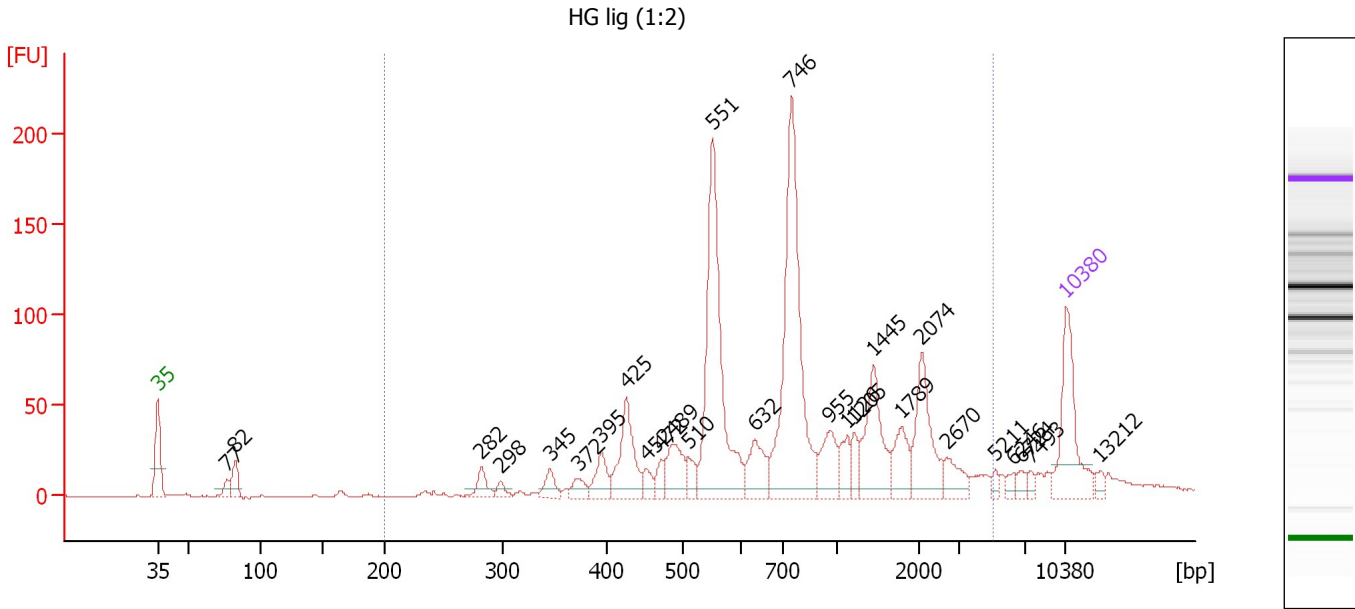
**Peak table for Ladder**

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	45.39
3	100	150.00	2,272.7	Ladder Peak	50.95
4	150	150.00	1,515.2	Ladder Peak	55.73
5	200	150.00	1,136.4	Ladder Peak	60.45
6	300	150.00	757.6	Ladder Peak	69.60
7	400	150.00	568.2	Ladder Peak	77.65
8	500	150.00	454.5	Ladder Peak	83.42
9	600	150.00	378.8	Ladder Peak	87.99
10	700	150.00	324.7	Ladder Peak	91.22
11	1,000	150.00	227.3	Ladder Peak	95.35
12	2,000	150.00	113.6	Ladder Peak	101.66
13	3,000	150.00	75.8	Ladder Peak	104.80
14	7,000	150.00	32.5	Ladder Peak	109.87
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : HG lig (1:2)**

Number of peaks found: 27                      Corr. Area 1: 1,417.0  
 Noise: 0.4

**Peak table for sample 2 : HG lig (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	77	12.92	255.5		48.35
3	82	28.86	532.9		48.96
4	282	23.09	124.1		67.93
5	298	10.01	50.8		69.45
6	345	19.05	83.6		73.23
7	372	15.43	62.8		75.40
8	395	29.84	114.6		77.22
9	425	76.79	273.9		79.09
10	452	14.12	47.3		80.65
11	472	15.52	49.8		81.81
12	489	47.32	146.7		82.77
13	510	16.27	48.3		83.88
14	551	245.81	676.1		85.75
15	632	44.28	106.2		89.03
16	746	275.21	559.2		91.85
17	955	41.03	65.1		94.73
18	1,126	21.77	29.3		96.14
19	1,205	16.54	20.8		96.65
20	1,445	75.35	79.0		98.16
21	1,789	33.32	28.2		100.33
22	2,074	68.77	50.2		101.90
23	2,670	23.63	13.4		103.76
24	5,211	5.70	1.7		107.60
25	6,246	5.87	1.4		108.91

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : HG lig (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	6,724	8.29	1.9		109.52
27	7,493	5.76	1.2		110.33
28	10,380	75.00	10.9	Upper Marker	113.00
29	13,212	0.00	0.0		115.62

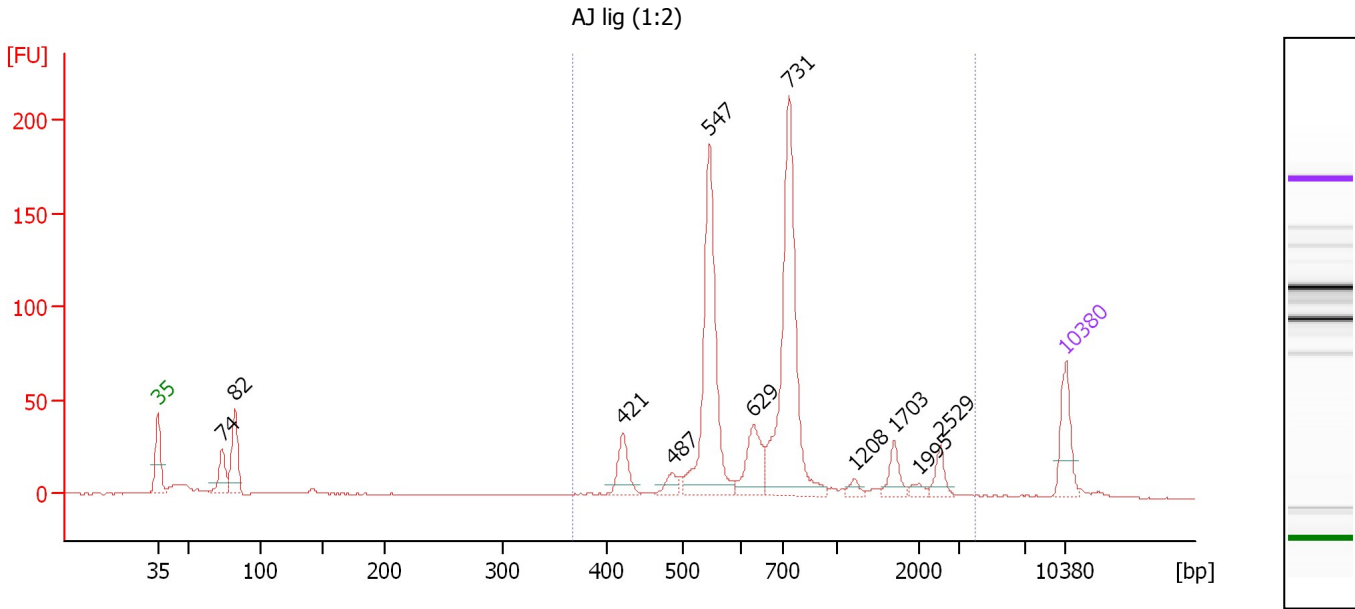
**Region table for sample 2 : HG lig (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	5,006	1,014	1,417.0	2,715.0	1,151.91	89	75.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : AJ lig (1:2)**

Number of peaks found: 11                      Corr. Area 1: 757.9  
 Noise: 0.3

**Peak table for sample 3 : AJ lig (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	74	78.93	1,624.1		48.02
3	82	136.55	2,511.7		48.99
4	421	71.33	256.9		78.84
5	487	26.68	83.0		82.69
6	547	423.85	1,174.8		85.55
7	629	100.54	242.1		88.93
8	731	503.53	1,044.1		91.65
9	1,208	13.91	17.4		96.66
10	1,703	37.78	33.6		99.79
11	1,995	11.51	8.7		101.63
12	2,529	30.54	18.3		103.32
13	10,380	75.00	10.9	Upper Marker	113.00

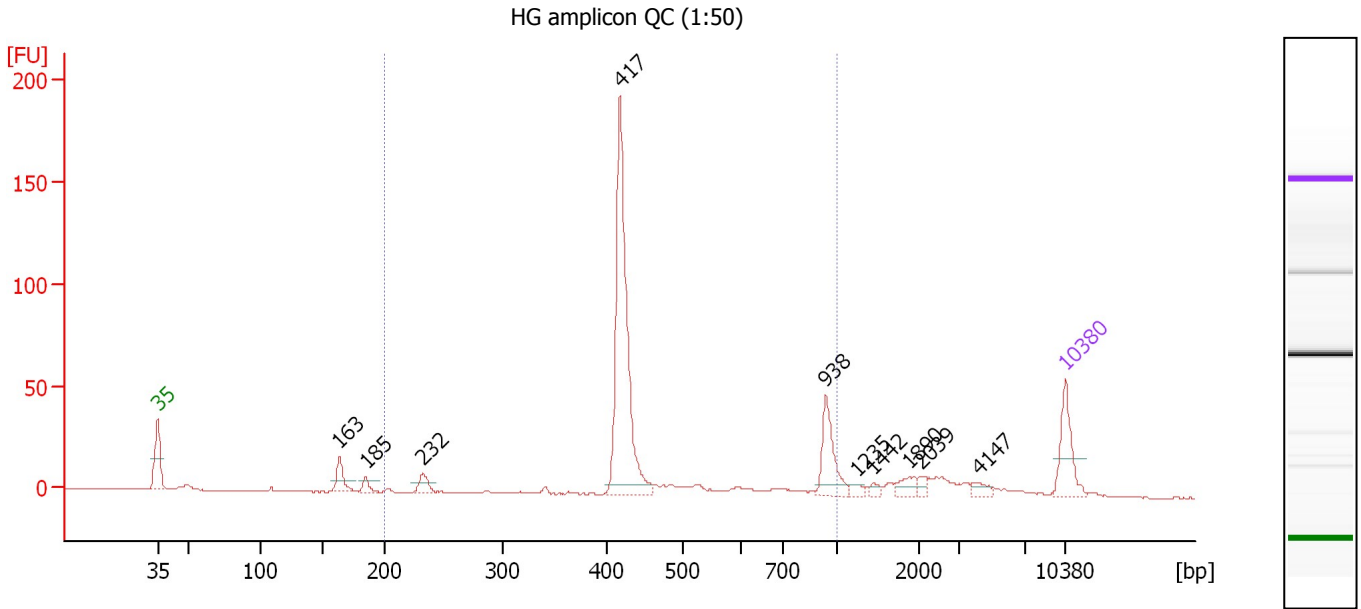
**Region table for sample 3 : AJ lig (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
366	3,889	795	757.9	3,070.8	1,307.29	83	60.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : HG amplicon QC (1:50)**

Number of peaks found: 10                      Corr. Area 1: 315.5  
 Noise: 0.2

**Peak table for sample 6 : HG amplicon QC (1:50)**

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	163	52.00	482.3		56.99
3	185	19.90	162.8		59.06
4	232	30.88	201.4		63.41
5	417	507.81	1,843.5		78.65
6	938	96.22	155.5		94.49
7	1,235	11.71	14.4		96.83
8	1,442	9.72	10.2		98.14
9	1,890	22.46	18.0		100.97
10	2,039	10.37	7.7		101.79
11	4,147	16.47	6.0		106.25
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 6 : HG amplicon QC (1:50)**

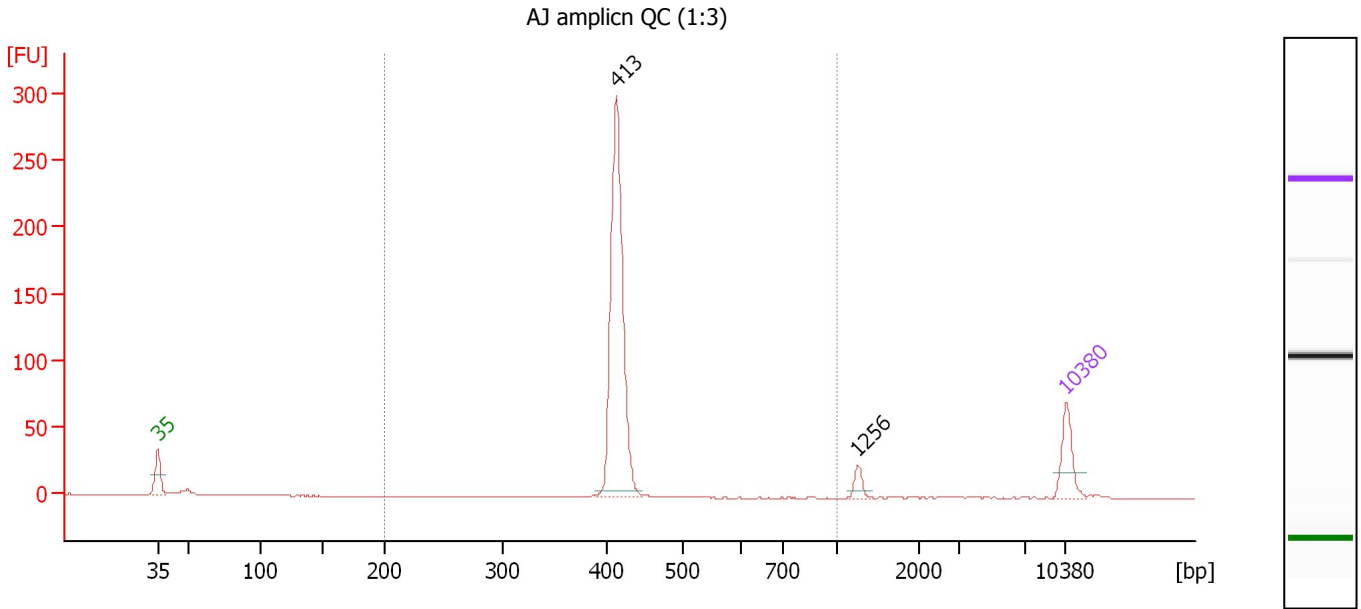
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	517	315.5	2,336.6	688.68	72	38.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : AJ amplicon QC (1:3)**

Number of peaks found: 2                      Corr. Area 1: 388.9  
 Noise: 0.2

**Peak table for sample 7 : AJ amplicon QC (1:3)**

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	413	725.72	2,663.9		78.39
3	1,256	25.62	30.9		96.97
4	10,380	75.00	10.9	Upper Marker	113.00

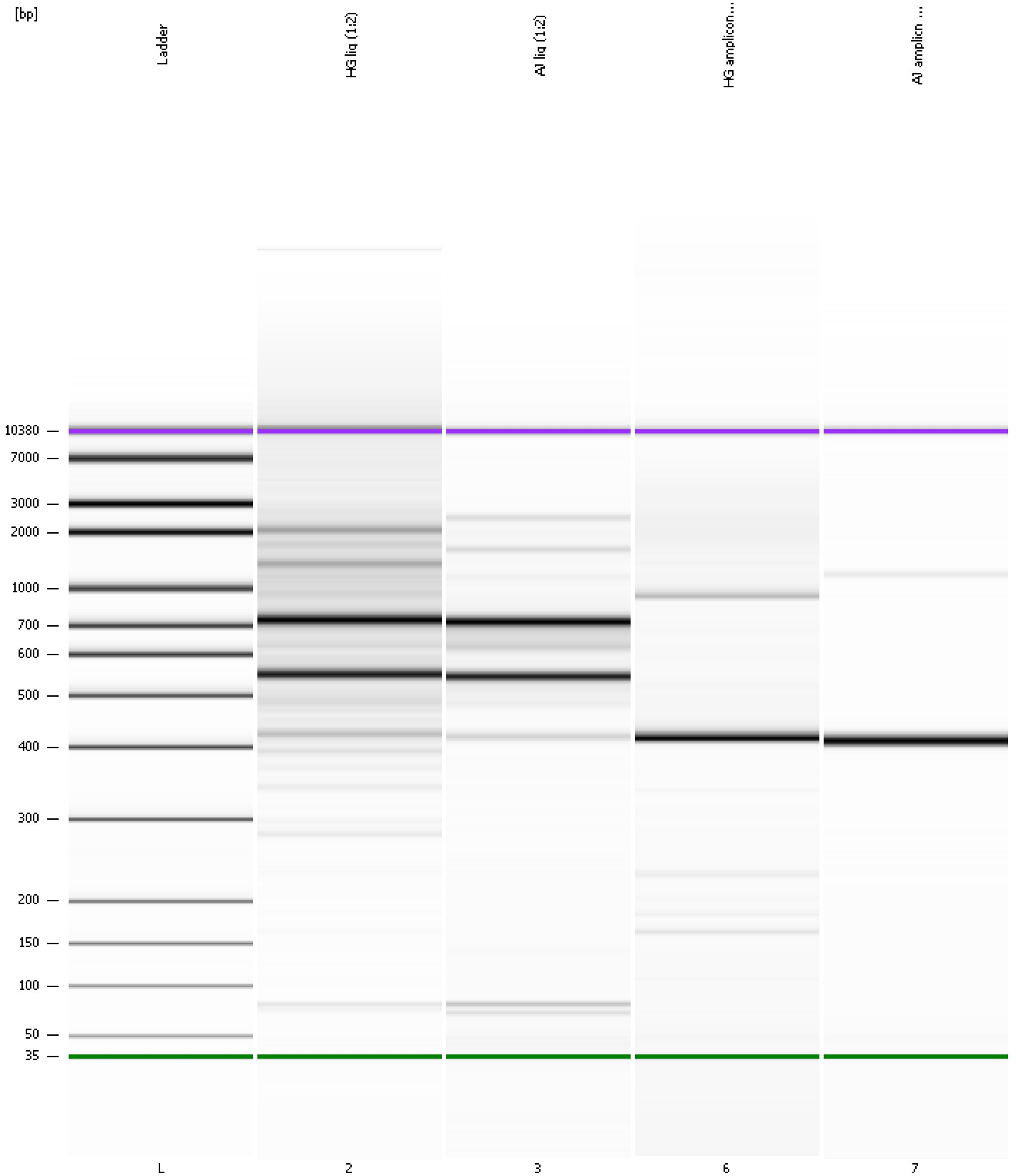
**Region table for sample 7 : AJ amplicon QC (1:3)**

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	414	388.9	2,656.0	724.96	91	2.0

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
Modified: 11/21/2016 5:08:48 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-11-21\2016-11-21\_004\_MiSeq429\_Lig\_AmpliconQC.xad

Created: 11/21/2016 2:28:13 PM  
 Modified: 11/21/2016 5:08:48 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		11/21/2016 3:09:31 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-11-21\2016-11-21_004.xad)		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/21/2016 2:28:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1