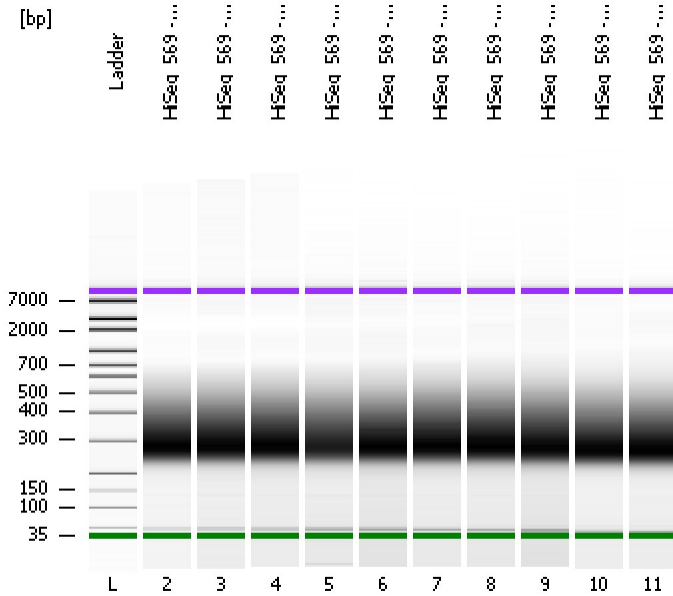


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
Modified: 8/25/2016 4:25:37 PM

**Electrophoresis File Run Summary**



Instrument Information:

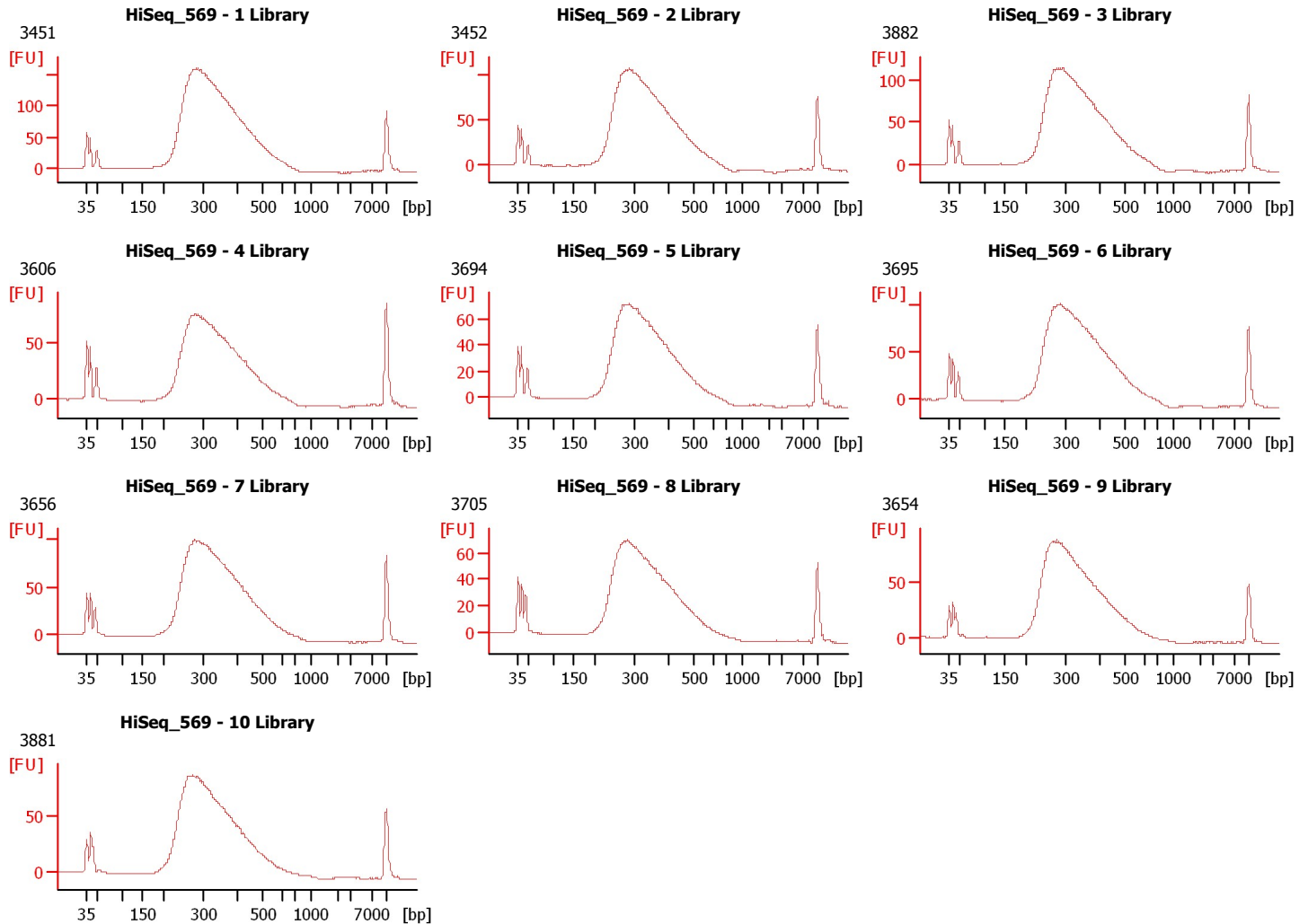
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HiSeq_569 - 1 Library	3451	<input type="checkbox"/>	✓			
HiSeq_569 - 2 Library	3452	<input type="checkbox"/>	✓			
HiSeq_569 - 3 Library	3882	<input type="checkbox"/>	✓			
HiSeq_569 - 4 Library	3606	<input type="checkbox"/>	✓			
HiSeq_569 - 5 Library	3694	<input type="checkbox"/>	✓			
HiSeq_569 - 6 Library	3695	<input type="checkbox"/>	✓			
HiSeq_569 - 7 Library	3656	<input type="checkbox"/>	✓			
HiSeq_569 - 8 Library	3705	<input type="checkbox"/>	✓			
HiSeq_569 - 9 Library	3654	<input type="checkbox"/>	✓			
HiSeq_569 - 10 Library	3881	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
Modified: 8/25/2016 4:25:37 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

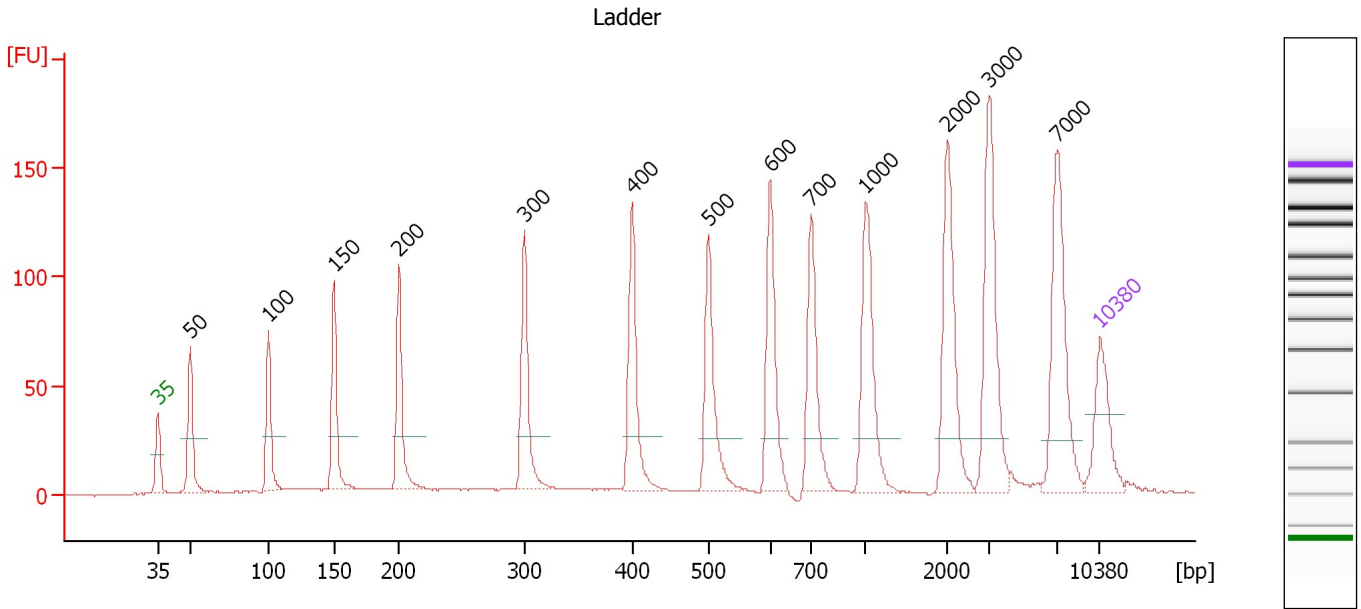
**Ladder**

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\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

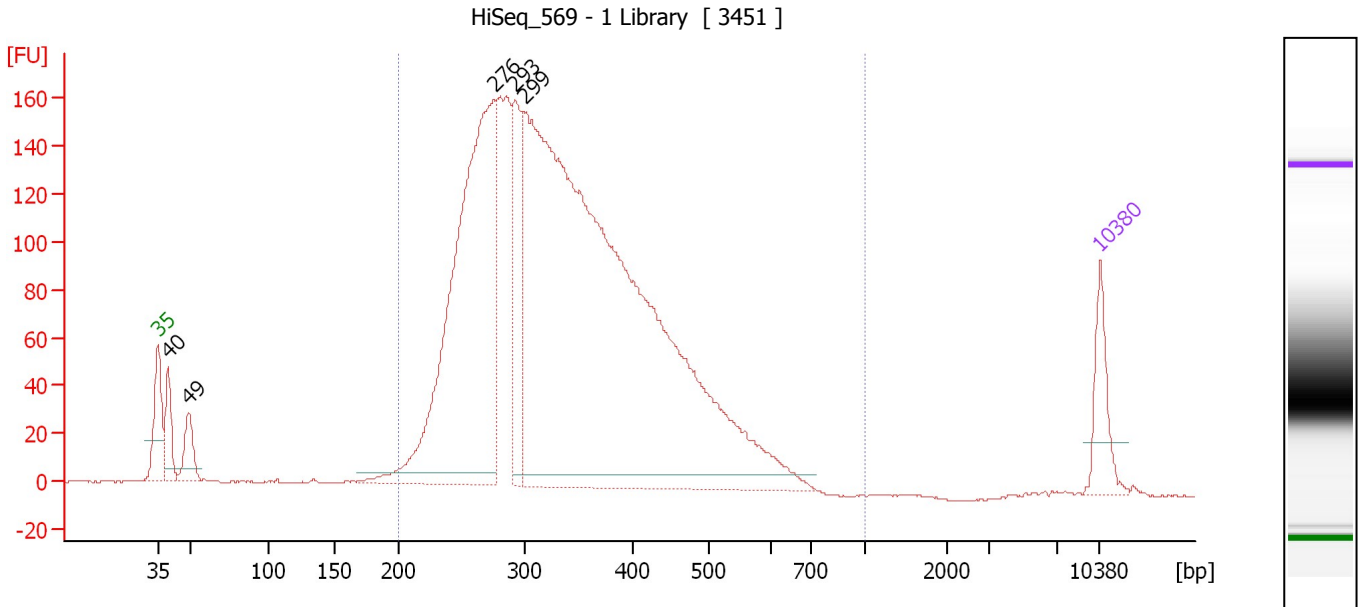
**Peak table for Ladder**

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	45.45
3	100	150.00	2,272.7	Ladder Peak	51.23
4	150	150.00	1,515.2	Ladder Peak	56.09
5	200	150.00	1,136.4	Ladder Peak	60.95
6	300	150.00	757.6	Ladder Peak	70.25
7	400	150.00	568.2	Ladder Peak	78.23
8	500	150.00	454.5	Ladder Peak	83.91
9	600	150.00	378.8	Ladder Peak	88.51
10	700	150.00	324.7	Ladder Peak	91.52
11	1,000	150.00	227.3	Ladder Peak	95.62
12	2,000	150.00	113.6	Ladder Peak	101.65
13	3,000	150.00	75.8	Ladder Peak	104.77
14	7,000	150.00	32.5	Ladder Peak	109.83
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : HiSeq 569 - 1 Library**

Number of peaks found: 5                      Corr. Area 1: 3,324.9  
 Noise: 0.3

**Peak table for sample 2 : HiSeq 569 - 1 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	40	97.17	3,677.2		43.82
3	49	83.84	2,583.7		45.32
4	276	1,195.50	6,572.7		67.98
5	293	240.67	1,245.6		69.58
6	299	2,881.48	14,582.7		70.20
7	10,380	75.00	10.9	Upper Marker	113.00

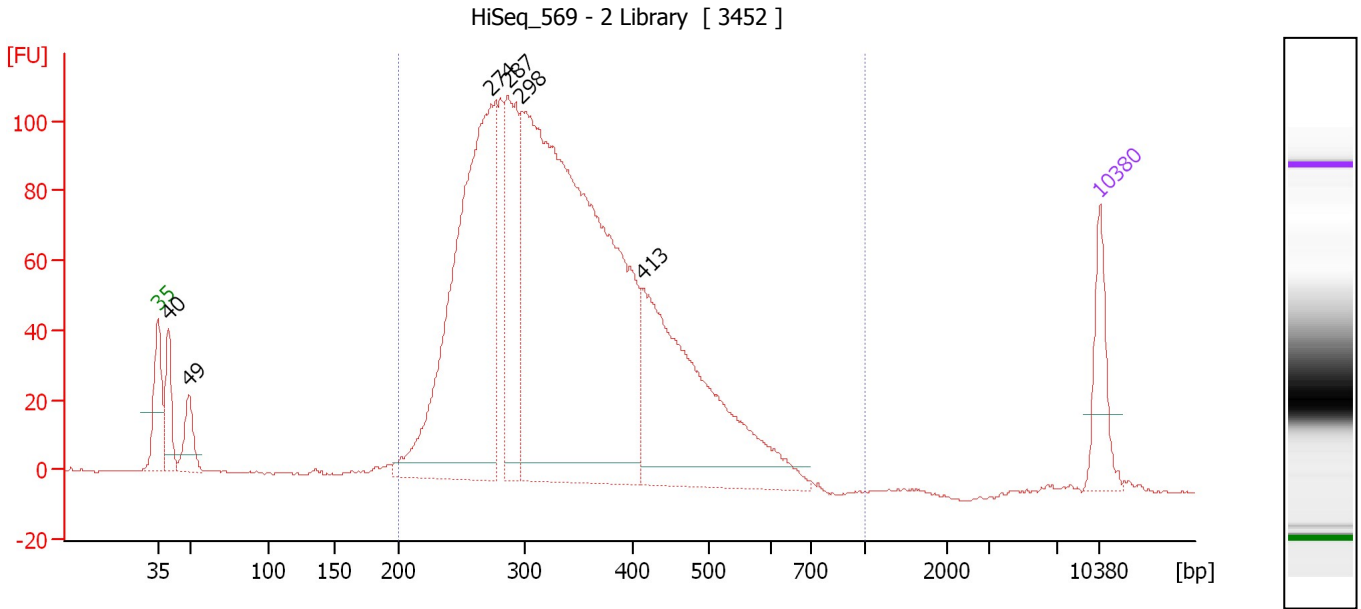
**Region table for sample 2 : HiSeq 569 - 1 Library**

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	342	3,324.9	20,520.2	4,305.01	96	24.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : HiSeq 569 - 2 Library**

Number of peaks found: 6                      Corr. Area 1: 2,215.6  
 Noise: 0.3

**Peak table for sample 3 : HiSeq 569 - 2 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	40	102.89	3,889.2		43.83
3	49	82.28	2,528.6		45.34
4	274	934.64	5,173.8		67.81
5	287	305.97	1,614.6		69.05
6	298	1,709.72	8,700.5		70.04
7	413	579.81	2,125.3		78.99
8	10,380	75.00	10.9	Upper Marker	113.00

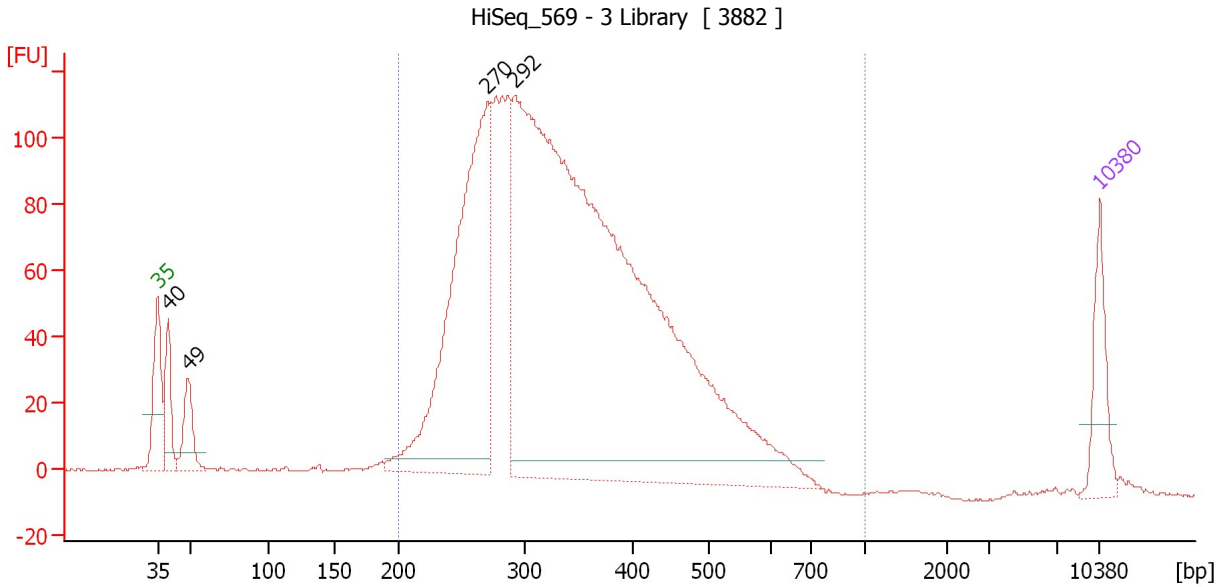
**Region table for sample 3 : HiSeq 569 - 2 Library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	342	2,215.6	16,300.5	3,424.12	95	24.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : HiSeq 569 - 3 Library**

Number of peaks found: 4                      Corr. Area 1: 2,356.4  
 Noise: 0.3

**Peak table for sample 4 : HiSeq 569 - 3 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	40	101.55	3,862.2		43.79
3	49	93.78	2,907.5		45.27
4	270	822.74	4,610.9		67.49
5	292	2,605.16	13,495.7		69.55
6	10,380	75.00	10.9	Upper Marker	113.00

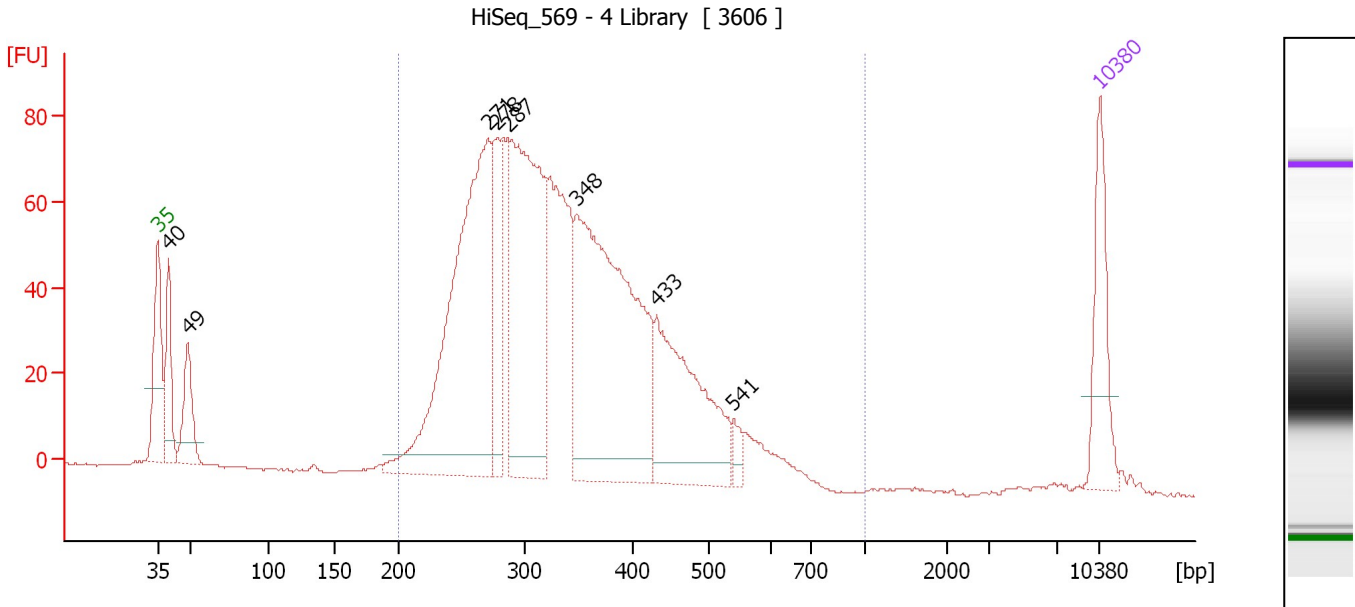
**Region table for sample 4 : HiSeq 569 - 3 Library**

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	344	2,356.4	16,043.8	3,381.19	95	24.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : HiSeq 569 - 4 Library**

Number of peaks found: 8                      Corr. Area 1: 1,526.1  
 Noise: 0.2

**Peak table for sample 5 : HiSeq 569 - 4 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	40	99.34	3,773.2		43.80
3	49	86.05	2,677.3		45.24
4	271	568.39	3,179.4		67.54
5	278	123.81	674.0		68.24
6	287	436.18	2,298.7		69.09
7	348	534.14	2,323.7		74.11
8	433	233.79	818.8		80.08
9	541	16.80	47.1		85.79
10	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 5 : HiSeq 569 - 4 Library**

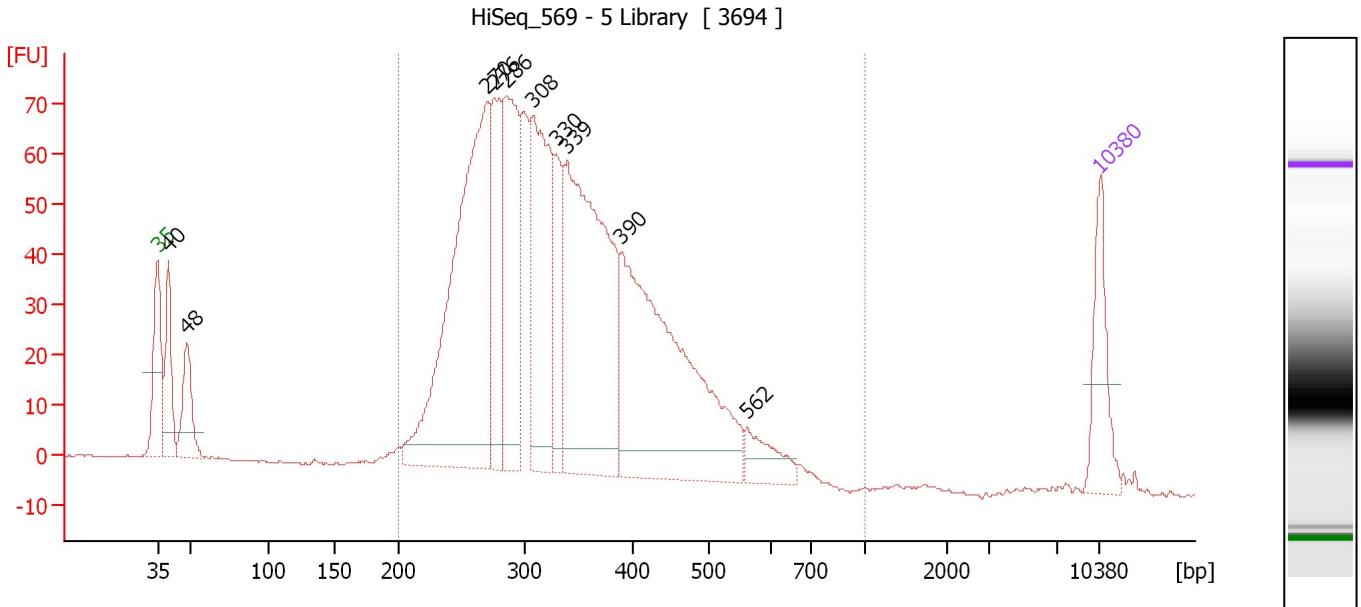
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	341	1,526.1	9,902.5	2,076.89	94	23.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : HiSeq 569 - 5 Library**

Number of peaks found: 10                      Corr. Area 1: 1,491.5  
 Noise: 0.2

**Peak table for sample 6 : HiSeq 569 - 5 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	40	120.16	4,558.4		43.81
3	48	101.98	3,207.5		45.16
4	270	683.15	3,833.1		67.46
5	276	173.62	951.7		68.06
6	286	281.09	1,490.8		68.92
7	308	312.75	1,540.5		70.86
8	330	112.44	516.4		72.64
9	339	555.23	2,479.0		73.39
10	390	548.71	2,131.6		77.43
11	562	53.76	144.9		86.76
12	10,380	75.00	10.9	Upper Marker	113.00

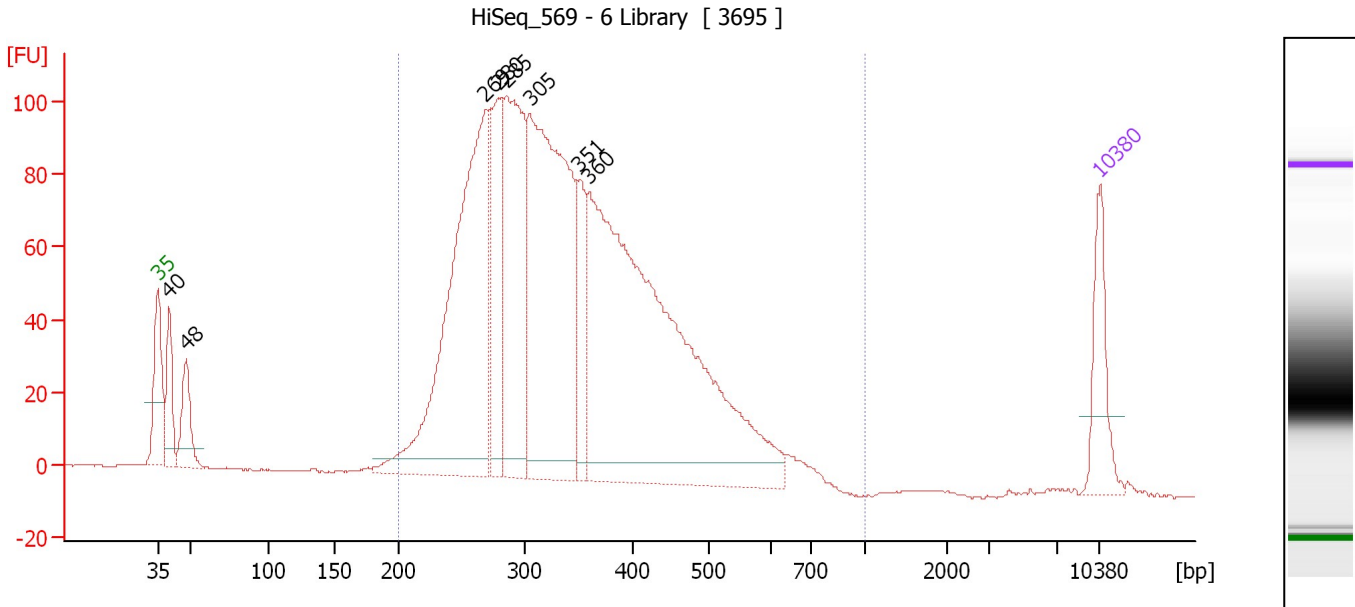
**Region table for sample 6 : HiSeq 569 - 5 Library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	342	1,491.5	13,372.5	2,801.44	94	24.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : HiSeq 569 - 6 Library**

Number of peaks found: 8                      Corr. Area 1: 2,173.2  
 Noise: 0.2

**Peak table for sample 7 : HiSeq 569 - 6 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	40	94.59	3,554.1		43.87
3	48	94.03	2,969.2		45.12
4	269	723.27	4,076.8		67.35
5	280	209.47	1,133.8		68.39
6	285	376.44	1,999.9		68.88
7	305	713.37	3,540.8		70.67
8	351	107.00	461.9		74.32
9	360	1,102.26	4,640.5		75.03
10	10,380	75.00	10.9	Upper Marker	113.00

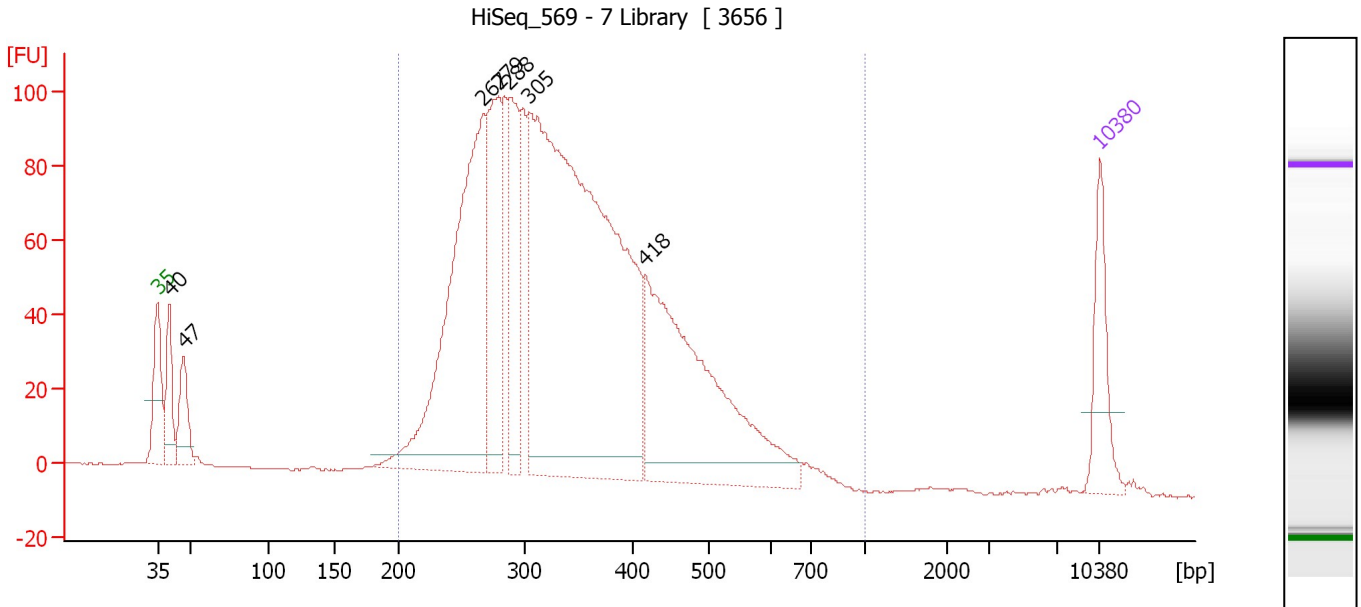
**Region table for sample 7 : HiSeq 569 - 6 Library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	348	2,173.2	14,658.0	3,105.91	95	25.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : HiSeq 569 - 7 Library**

Number of peaks found: 7                      Corr. Area 1: 2,122.3  
 Noise: 0.2

**Peak table for sample 8 : HiSeq 569 - 7 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	40	95.19	3,570.5		43.88
3	47	89.76	2,906.1		44.93
4	267	650.34	3,685.5		67.22
5	279	239.82	1,304.1		68.26
6	288	187.92	990.3		69.09
7	305	1,351.51	6,718.4		70.64
8	418	507.73	1,841.2		79.24
9	10,380	75.00	10.9	Upper Marker	113.00

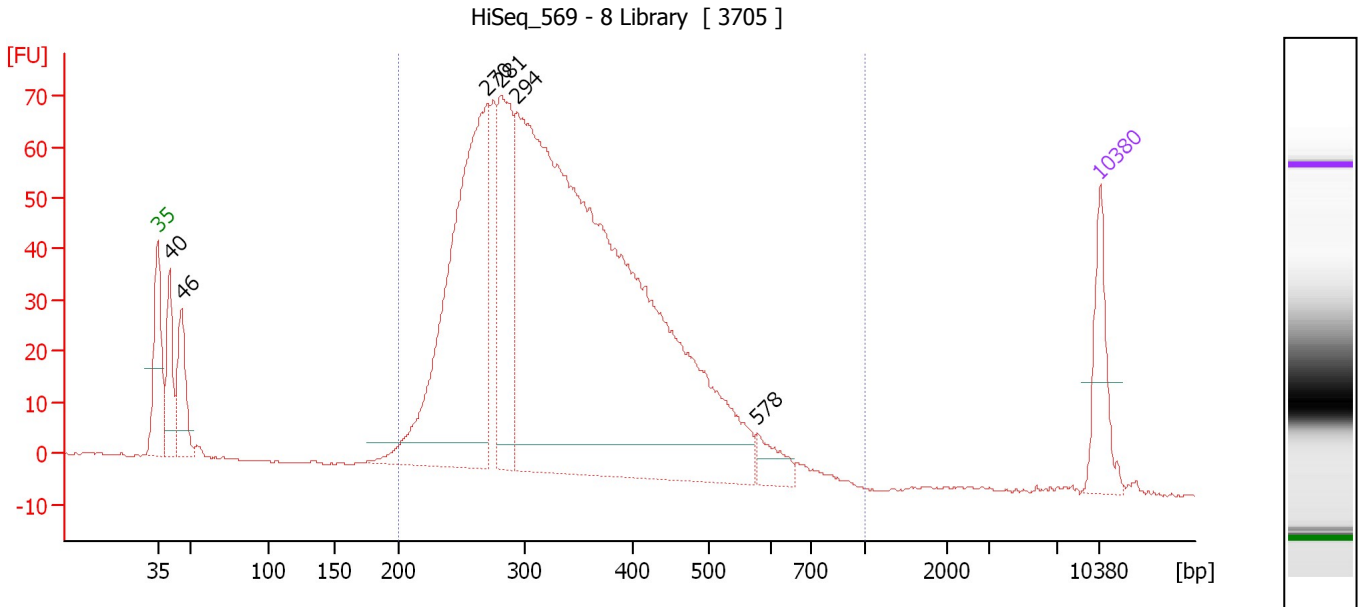
**Region table for sample 8 : HiSeq 569 - 7 Library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	348	2,122.3	14,210.3	3,010.90	95	26.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : HiSeq 569 - 8 Library**

Number of peaks found: 6                      Corr. Area 1: 1,450.7  
 Noise: 0.2

**Peak table for sample 9 : HiSeq 569 - 8 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	40	125.79	4,713.9		43.89
3	46	126.48	4,178.4		44.78
4	270	778.76	4,363.5		67.50
5	281	289.66	1,561.0		68.50
6	294	2,151.15	11,075.2		69.72
7	578	40.36	105.8		87.50
8	10,380	75.00	10.9	Upper Marker	113.00

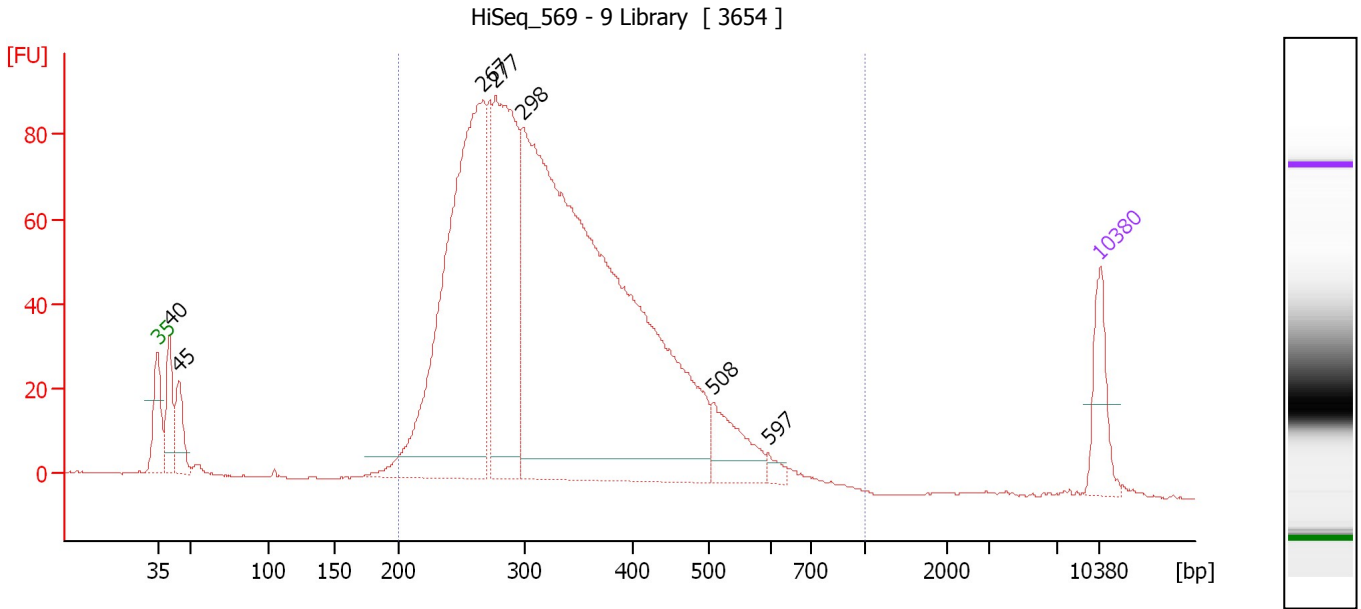
**Region table for sample 9 : HiSeq 569 - 8 Library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	341	1,450.7	14,560.3	3,035.45	94	25.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : HiSeq 569 - 9 Library**

Number of peaks found: 7                      Corr. Area 1: 1,767.2  
 Noise: 0.2

**Peak table for sample 10 : HiSeq 569 - 9 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	40	117.24	4,388.5		43.90
3	45	89.51	3,042.0		44.57
4	267	1,045.06	5,941.5		67.14
5	277	606.60	3,321.3		68.09
6	298	2,168.05	11,008.7		70.10
7	508	116.50	347.5		84.27
8	597	15.43	39.2		88.36
9	10,380	75.00	10.9	Upper Marker	113.00

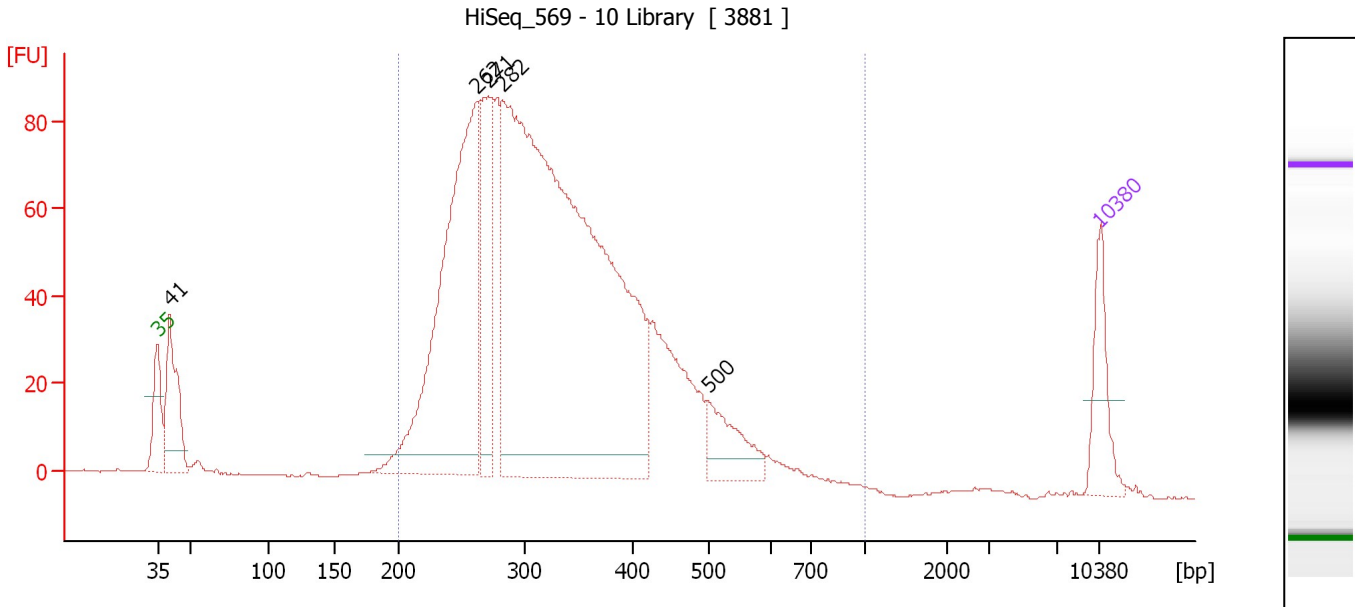
**Region table for sample 10 : HiSeq 569 - 9 Library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	336	1,767.2	18,745.5	3,840.76	95	25.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : HiSeq 569 - 10 Library**

Number of peaks found: 5                      Corr. Area 1: 1,723.9  
 Noise: 0.1

**Peak table for sample 11 : HiSeq 569 - 10 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	41	197.67	7,389.6		43.90
3	262	814.19	4,702.5		66.75
4	271	245.11	1,368.1		67.60
5	282	1,934.58	10,380.2		68.61
6	500	101.63	308.2		83.88
7	10,380	75.00	10.9	Upper Marker	113.00

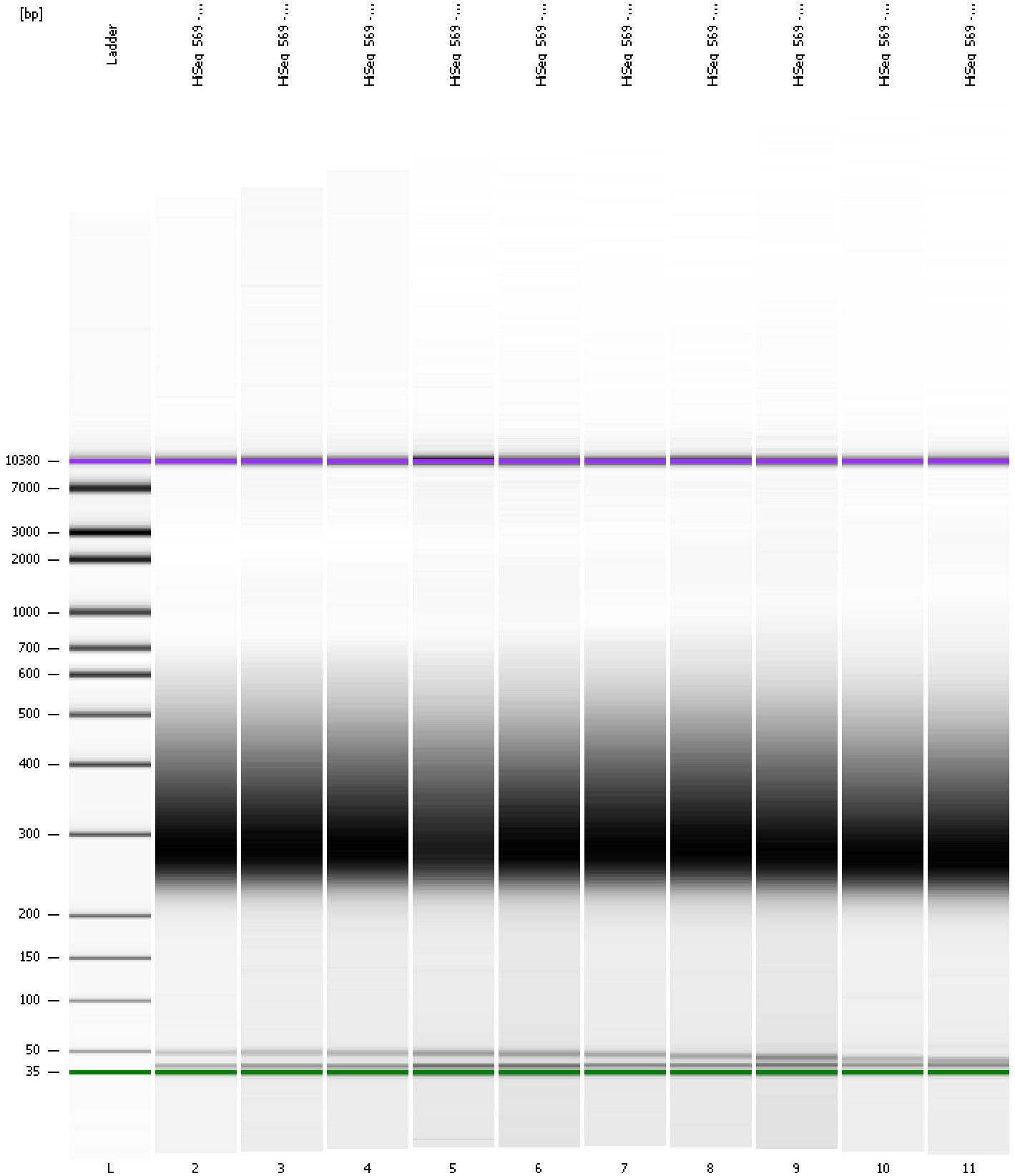
**Region table for sample 11 : HiSeq 569 - 10 Library**

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	335	1,723.9	16,533.9	3,376.36	95	26.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
Modified: 8/25/2016 4:25:37 PM

Gel Image



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...\data\2016-08-25\2016-08-25\_002\_HiSeq569\_Libraries\_1-10.xad

Created: 8/25/2016 11:49:16 AM  
 Modified: 8/25/2016 4:25:37 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		8/25/2016 12:29:44 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\2016-08-25\2016-08-25_002.xad)		Instrument	Run		8/25/2016 11:49:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/25/2016 11:49:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/25/2016 11:49:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/25/2016 11:49:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/25/2016 11:49:21 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/25/2016 11:49:21 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/25/2016 11:49:21 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1