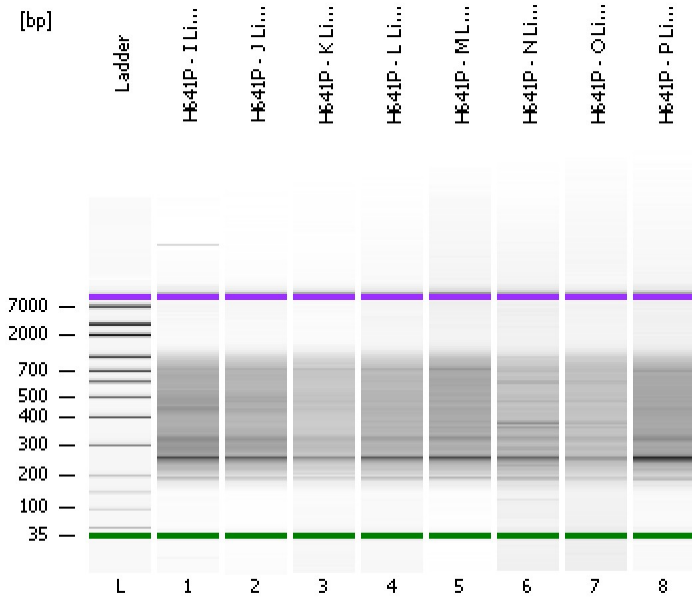


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

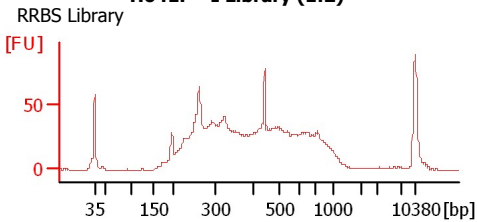
Assay Information:

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

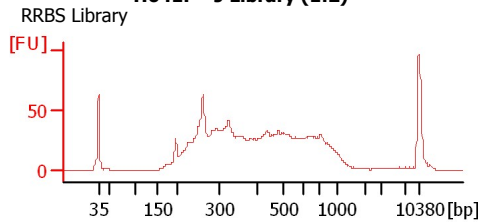
Chip Information:

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

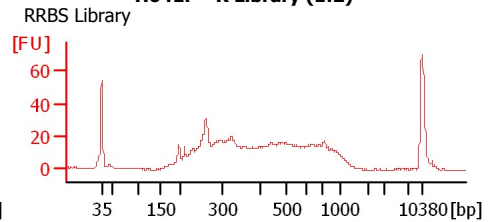
**H641P - I Library (1:2)**



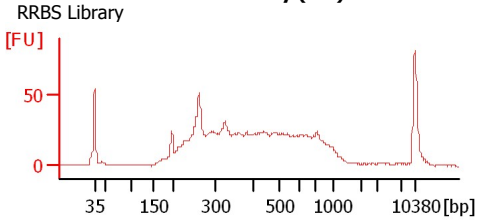
**H641P - J Library (1:2)**



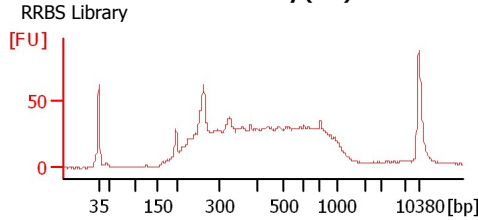
**H641P - K Library (1:2)**



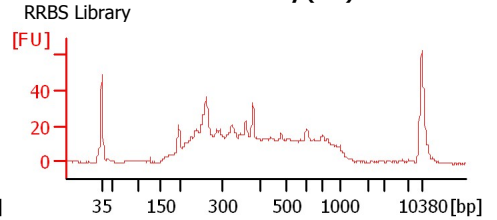
**H641P - L Library (1:2)**



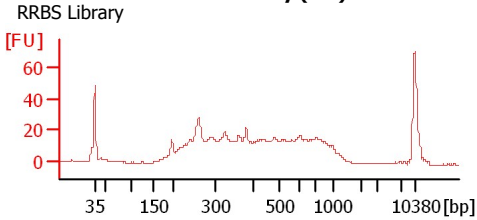
**H641P - M Library (1:2)**



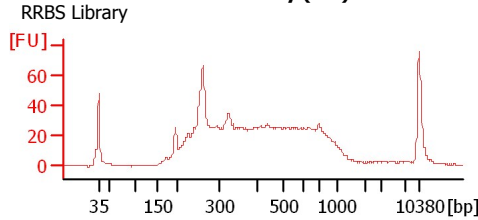
**H641P - N Library (1:2)**



**H641P - O Library (1:2)**



**H641P - P Library (1:2)**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H641P - I Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - J Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - K Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - L Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - M Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - N Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - O Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
H641P - P Library (1:2)	RRBS Library	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

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

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 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

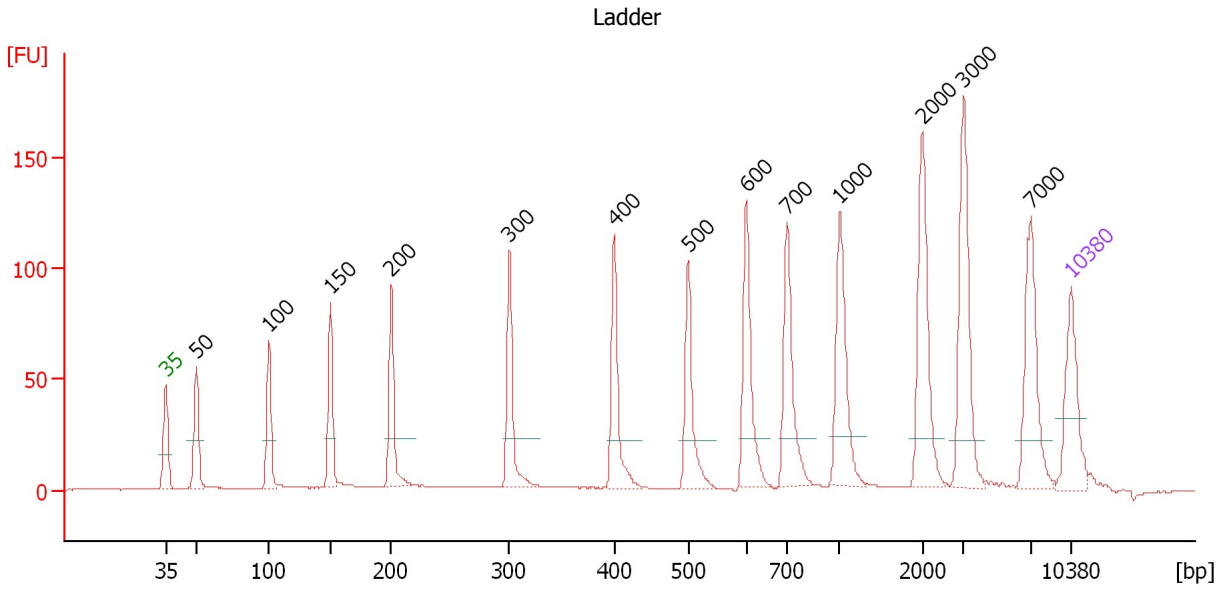
**Ladder**

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:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

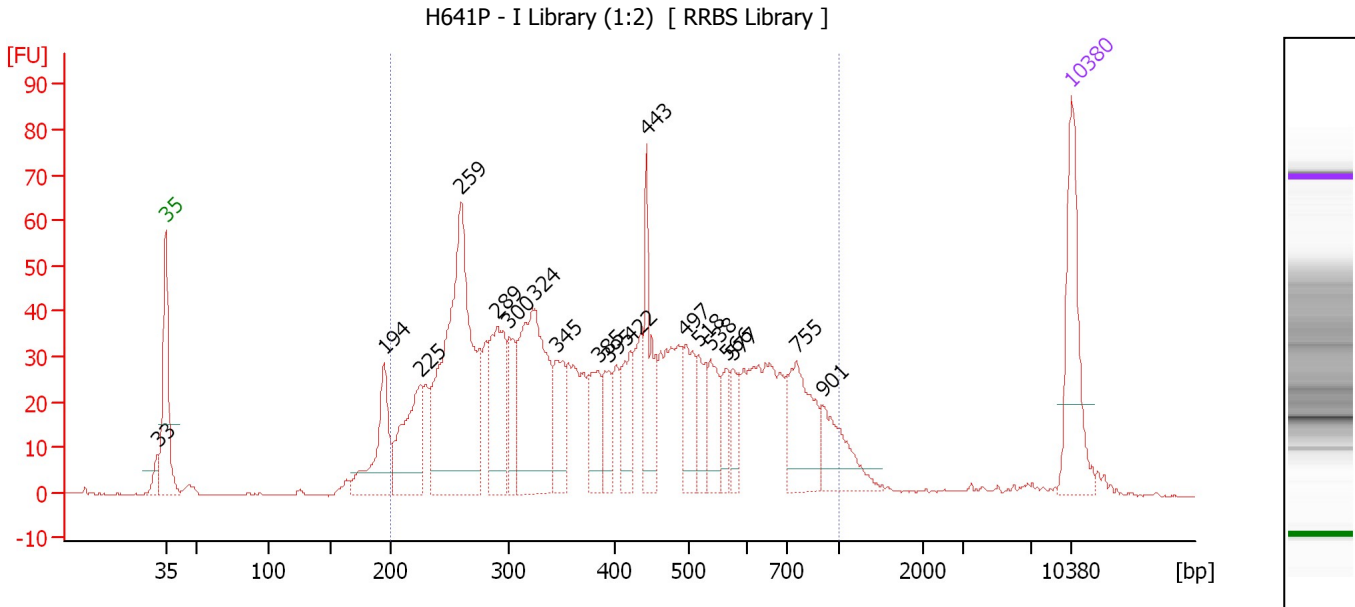
**Peak table for Ladder**

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	45.37
3	100	150.00	2,272.7	Ladder Peak	50.99
4	150	150.00	1,515.2	Ladder Peak	55.73
5	200	150.00	1,136.4	Ladder Peak	60.42
6	300	150.00	757.6	Ladder Peak	69.55
7	400	150.00	568.2	Ladder Peak	77.64
8	500	150.00	454.5	Ladder Peak	83.36
9	600	150.00	378.8	Ladder Peak	87.90
10	700	150.00	324.7	Ladder Peak	91.04
11	1,000	150.00	227.3	Ladder Peak	95.11
12	2,000	150.00	113.6	Ladder Peak	101.51
13	3,000	150.00	75.8	Ladder Peak	104.70
14	7,000	150.00	32.5	Ladder Peak	109.91
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : H641P - I Library (1:2)**

Number of peaks found: 19                      Corr. Area 1: 1,330.7  
 Noise: 0.2

**Peak table for sample 1 : H641P - I Library (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.38
2	35	125.00	5,411.3	Lower Marker	43.00
3	194	89.28	697.6		59.85
4	225	100.65	677.8		62.70
5	259	326.73	1,910.6		65.81
6	289	102.51	537.0		68.56
7	300	46.28	233.7		69.55
8	324	187.51	875.9		71.52
9	345	54.49	239.4		73.18
10	385	45.53	179.1		76.44
11	395	31.41	120.5		77.22
12	422	43.25	155.4		78.88
13	443	70.37	240.4		80.13
14	497	48.44	147.7		83.19
15	518	30.64	89.6		84.17
16	538	38.23	107.6		85.10
17	566	24.16	64.7		86.35
18	577	23.85	62.6		86.87
19	755	78.83	158.1		91.79
20	901	50.62	85.2		93.76
21	10,380	75.00	10.9	Upper Marker	113.00

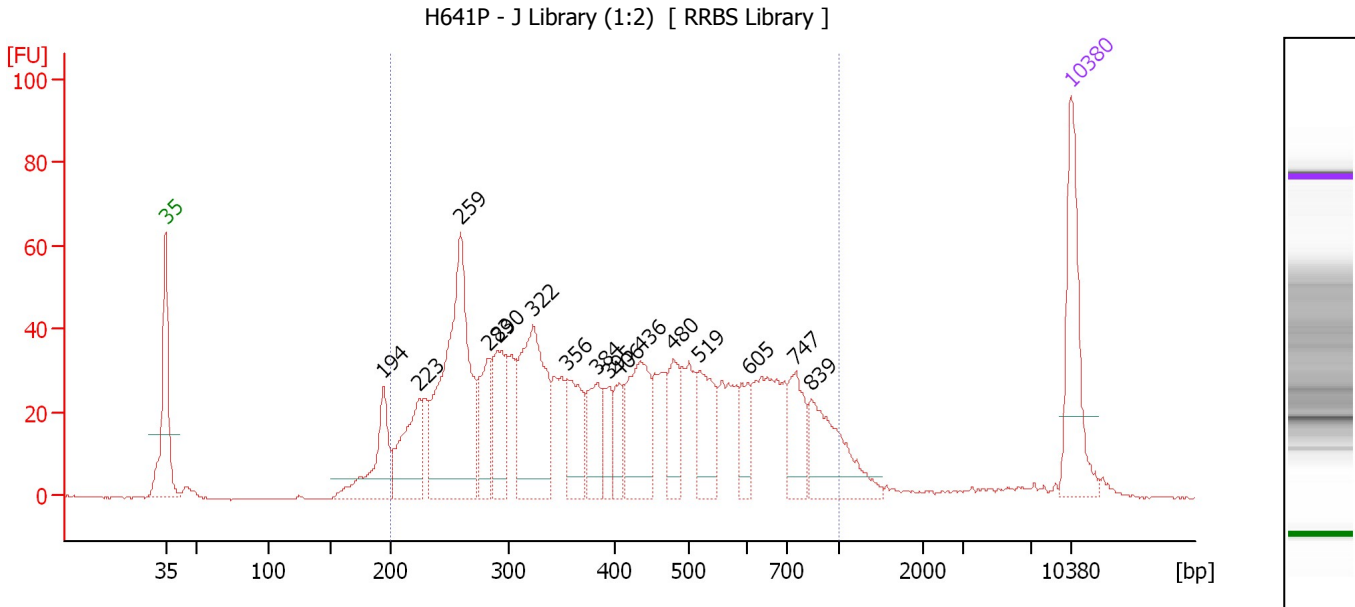
**Region table for sample 1 : H641P - I Library (1:2)**

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	435	1,330.7	7,619.2	1,772.82	91	40.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : H641P - J Library (1:2)**

Number of peaks found: 16                      Corr. Area 1: 1,281.5  
 Noise: 0.2

**Peak table for sample 2 : H641P - J Library (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	194	83.37	652.6		59.82
3	223	85.13	577.8		62.54
4	259	271.78	1,590.8		65.79
5	283	58.27	312.0		67.99
6	290	76.38	398.5		68.67
7	322	158.54	745.4		71.35
8	356	57.75	245.9		74.07
9	384	48.86	192.6		76.38
10	395	27.74	106.3		77.27
11	406	29.91	111.5		78.00
12	436	90.15	313.6		79.68
13	480	44.51	140.4		82.24
14	519	59.78	174.4		84.24
15	605	27.52	68.9		88.06
16	747	47.39	96.2		91.68
17	839	77.26	139.5		92.93
18	10,380	75.00	10.9	Upper Marker	113.00

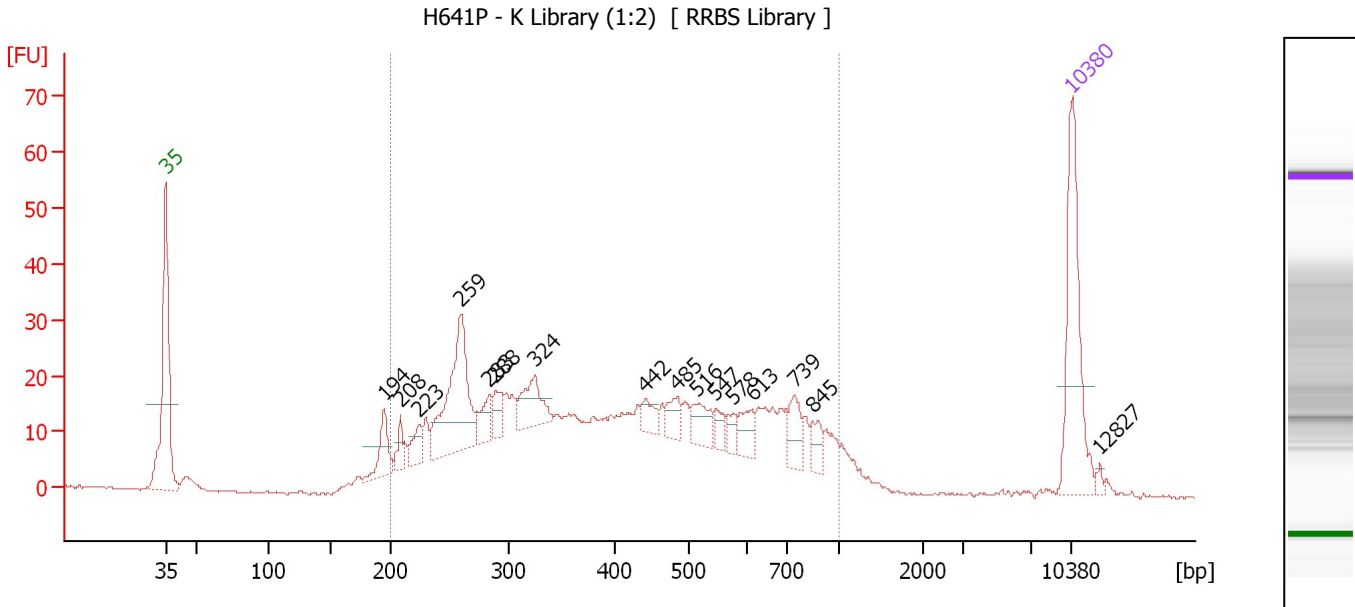
**Region table for sample 2 : H641P - J Library (1:2)**

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	438	1,281.5	6,473.5	1,509.08	92	41.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : H641P - K Library (1:2)**

Number of peaks found: 16                      Corr. Area 1: 649.7  
 Noise: 0.2

**Peak table for sample 3 : H641P - K Library (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	194	29.01	226.7		59.85
3	208	13.17	96.1		61.13
4	223	16.10	109.2		62.57
5	259	110.06	643.5		65.82
6	283	18.16	97.2		68.00
7	288	13.70	72.0		68.48
8	324	33.72	157.5		71.52
9	442	11.83	40.5		80.05
10	485	14.68	45.9		82.50
11	516	20.91	61.4		84.10
12	547	9.52	26.4		85.49
13	578	7.45	19.6		86.88
14	613	15.98	39.5		88.32
15	739	20.78	42.6		91.57
16	845	12.47	22.4		93.01
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,827	0.00	0.0		115.24

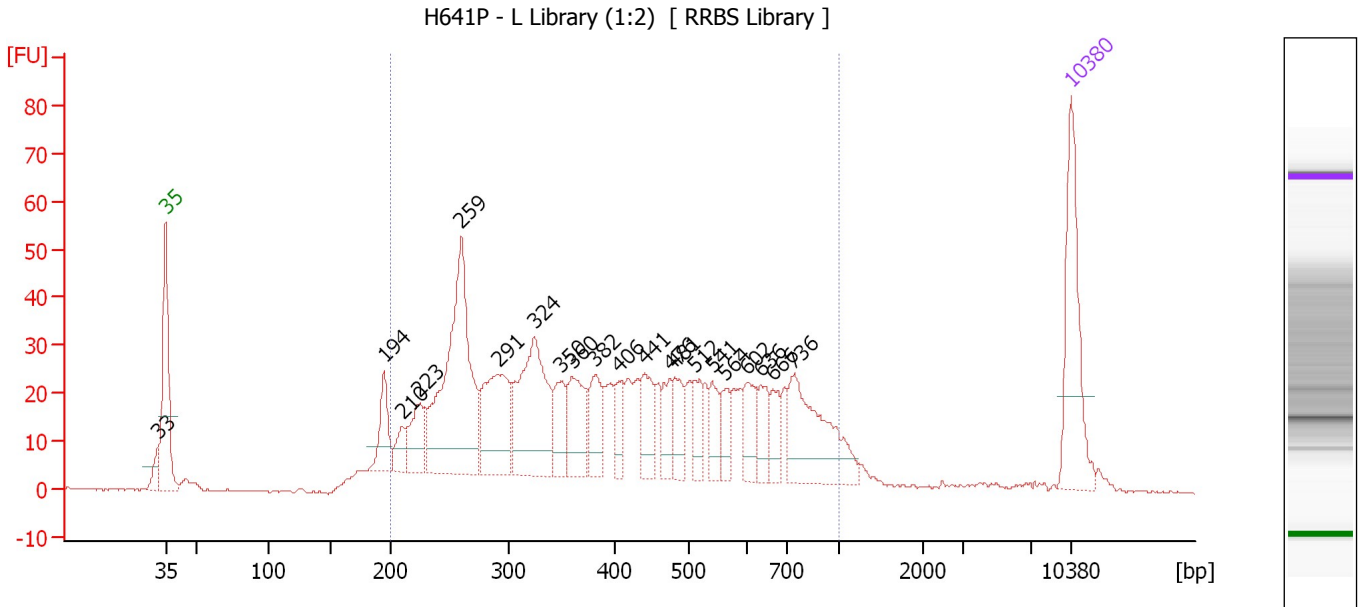
**Region table for sample 3 : H641P - K Library (1:2)**

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	444	649.7	4,405.1	1,033.90	92	41.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : H641P - L Library (1:2)**

Number of peaks found: 21                      Corr. Area 1: 995.7  
 Noise: 0.2

**Peak table for sample 4 : H641P - L Library (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.35
2	35	125.00	5,411.3	Lower Marker	43.00
3	194	43.49	339.9		59.85
4	210	20.83	150.4		61.32
5	223	41.84	284.4		62.51
6	259	231.82	1,355.0		65.83
7	291	101.65	529.6		68.71
8	324	139.40	652.2		71.48
9	350	37.05	160.4		73.60
10	360	56.24	236.6		74.41
11	382	39.78	157.7		76.21
12	406	23.36	87.1		78.00
13	441	36.82	126.4		80.01
14	476	25.80	82.2		81.97
15	481	29.96	94.3		82.29
16	512	25.56	75.6		83.92
17	541	26.11	73.1		85.23
18	564	18.89	50.7		86.26
19	602	30.60	77.1		87.95
20	636	24.38	58.1		89.03
21	666	20.76	47.3		89.96
22	736	100.36	206.6		91.53
23	10,380	75.00	10.9	Upper Marker	113.00



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**

... Region table for sample 4 :

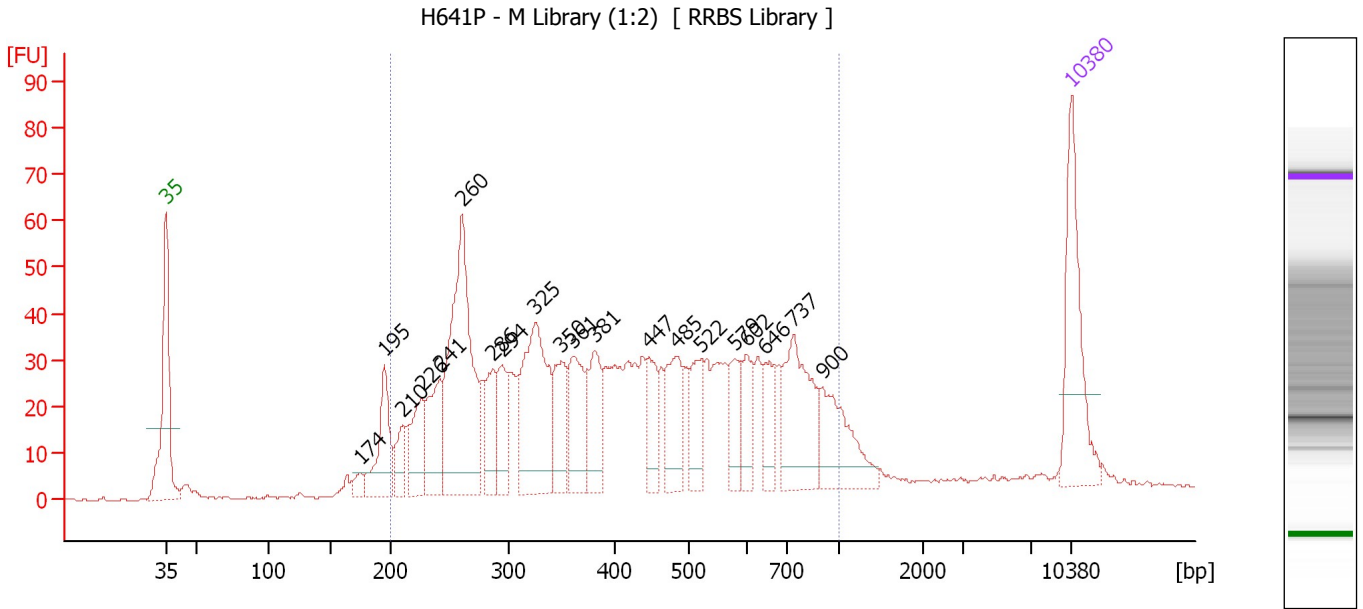
**H641P - L Library (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	439	995.7	5,965.3	■ 1,392.44	89	41.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : H641P - M Library (1:2)**

Number of peaks found: 20      Corr. Area 1: 1,245.9  
 Noise: 0.3

**Peak table for sample 5 : H641P - M Library (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	174	10.90	94.9		57.98
3	195	67.19	523.1		59.92
4	210	25.44	183.4		61.36
5	226	49.92	334.7		62.79
6	241	61.33	385.4		64.18
7	260	222.53	1,297.1		65.89
8	286	49.46	262.1		68.27
9	294	42.17	217.4		68.99
10	325	144.20	671.8		71.59
11	350	50.40	218.3		73.58
12	361	64.71	271.3		74.52
13	381	50.74	201.7		76.12
14	447	35.17	119.2		80.32
15	485	57.83	180.8		82.48
16	522	36.57	106.1		84.36
17	579	30.24	79.1		86.96
18	602	29.73	74.9		87.95
19	646	28.76	67.5		89.33
20	737	90.70	186.4		91.55
21	900	65.52	110.3		93.76
22	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**

... Region table for sample 5 :

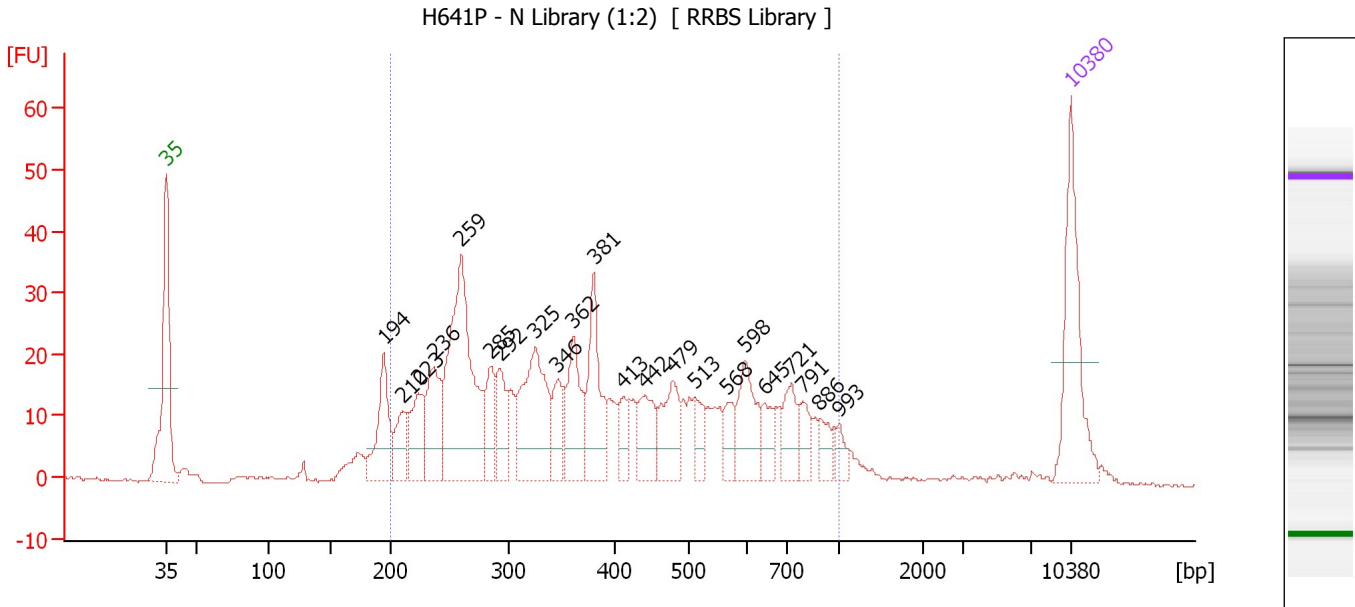
**H641P - M Library (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	450	1,245.9	6,491.0	■ 1,541.77	85	41.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : H641P - N Library (1:2)**

Number of peaks found: 22                      Corr. Area 1: 693.8  
 Noise: 0.2

**Peak table for sample 6 : H641P - N Library (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	194	68.95	538.6		59.86
3	210	34.43	248.7		61.31
4	223	47.29	321.0		62.54
5	236	64.57	414.3		63.72
6	259	207.60	1,212.3		65.85
7	285	38.14	203.0		68.14
8	292	39.37	204.3		68.82
9	325	111.73	521.1		71.56
10	346	33.96	148.9		73.24
11	362	56.83	238.2		74.53
12	381	72.59	288.7		76.10
13	413	23.96	87.9		78.39
14	442	39.39	135.2		80.02
15	479	47.31	149.7		82.14
16	513	17.38	51.4		83.94
17	568	17.97	47.9		86.46
18	598	49.01	124.2		87.80
19	645	20.13	47.3		89.31
20	721	30.66	64.4		91.33
21	791	18.92	36.2		92.28
22	886	14.05	24.0		93.57
23	993	10.19	15.5		95.02
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**

... Region table for sample 6 :

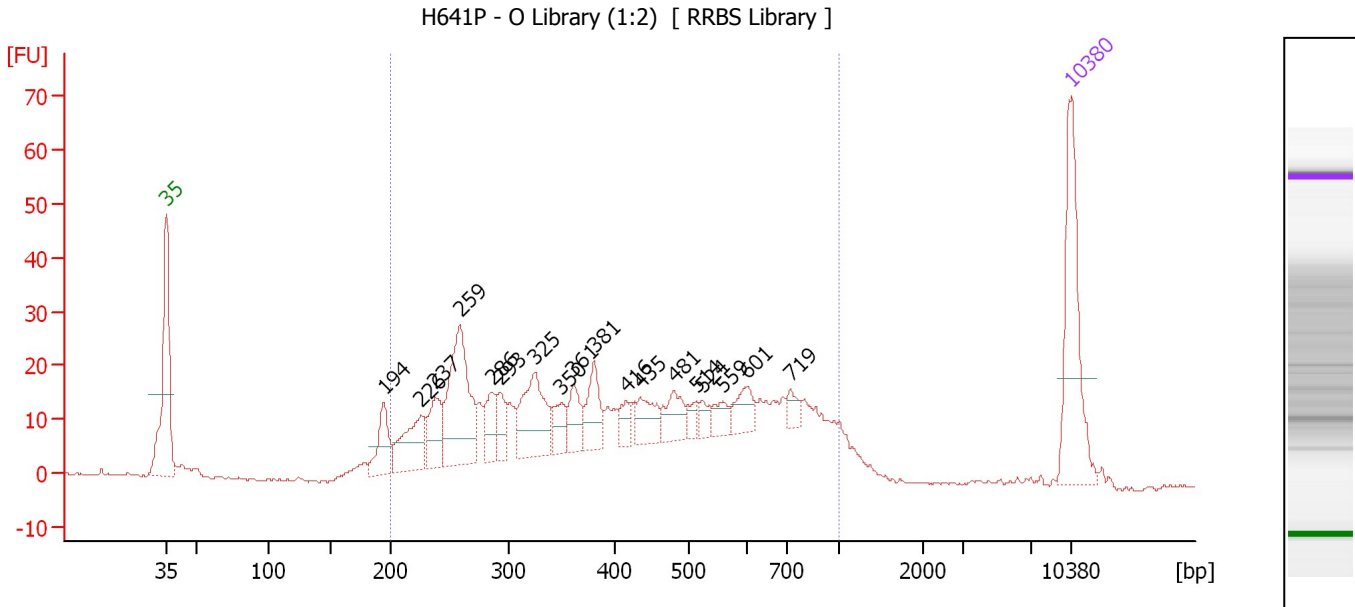
**H641P - N Library (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	429	693.8	5,371.7	■ 1,220.81	86	42.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : H641P - O Library (1:2)**

Number of peaks found: 18                      Corr. Area 1: 654.8  
 Noise: 0.2

**Peak table for sample 7 : H641P - O Library (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	194	38.31	299.4		59.84
3	226	51.74	347.5		62.76
4	237	37.03	236.3		63.84
5	259	113.03	661.9		65.78
6	286	25.67	136.1		68.24
7	293	20.33	105.3		68.86
8	325	66.64	310.9		71.55
9	350	19.61	84.9		73.60
10	361	24.37	102.2		74.52
11	381	33.22	132.1		76.12
12	416	13.36	48.6		78.57
13	435	25.16	87.6		79.66
14	481	24.52	77.2		82.28
15	514	7.79	23.0		84.00
16	524	8.05	23.3		84.45
17	559	12.99	35.2		86.05
18	601	19.35	48.8		87.93
19	719	9.06	19.1		91.30
20	10,380	75.00	10.9	Upper Marker	113.00

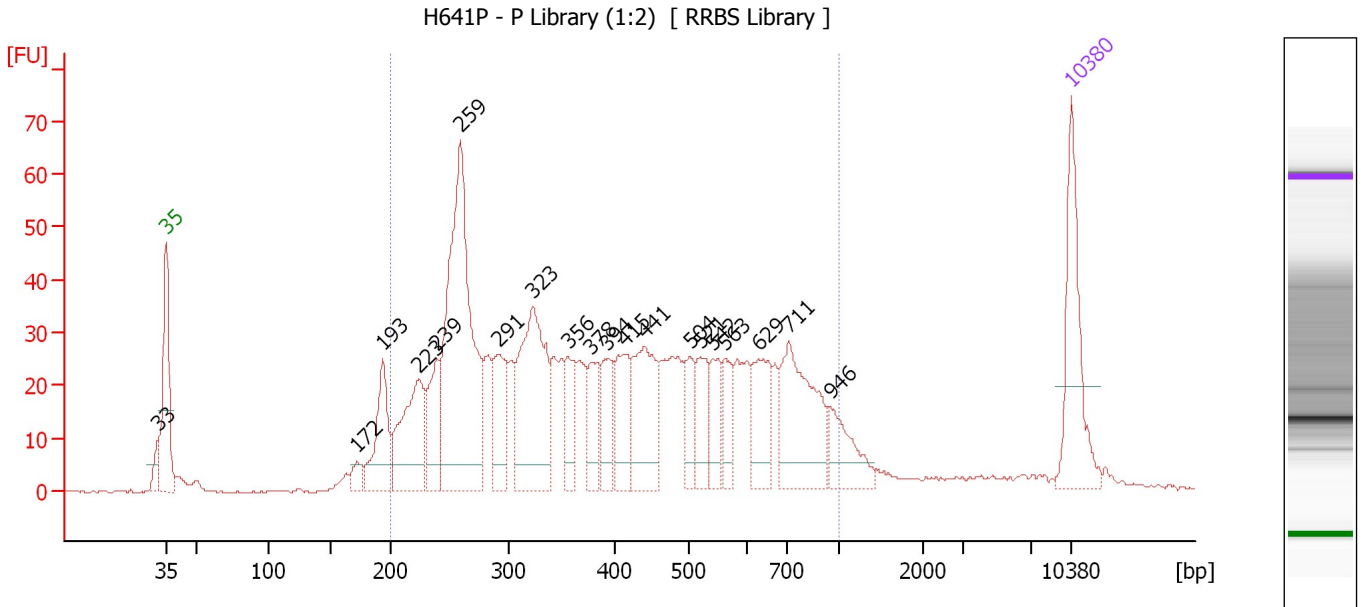
**Region table for sample 7 : H641P - O Library (1:2)**

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	451	654.8	4,223.7	1,001.97	88	41.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
 Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : H641P - P Library (1:2)**

Number of peaks found: 20                      Corr. Area 1: 1,115.8  
 Noise: 0.2

**Peak table for sample 8 : H641P - P Library (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.42
2	35	125.00	5,411.3	Lower Marker	43.00
3	172	14.05	123.9		57.79
4	193	77.86	611.4		59.76
5	223	113.55	770.6		62.54
6	239	59.91	379.6		63.99
7	259	327.26	1,915.6		65.79
8	291	63.40	329.8		68.75
9	323	167.45	785.2		71.42
10	356	36.70	156.1		74.09
11	378	39.05	156.4		75.88
12	394	41.26	158.6		77.16
13	415	57.19	208.8		78.49
14	441	90.39	310.3		80.00
15	504	33.12	99.6		83.54
16	521	41.59	121.1		84.29
17	542	35.56	99.4		85.28
18	563	27.85	75.0		86.21
19	629	54.79	131.9		88.82
20	711	114.21	243.3		91.19
21	946	41.41	66.3		94.38
22	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

**Electropherogram Summary Continued ...****... Region table for sample 8 :      H641P - P Library (1:2)**

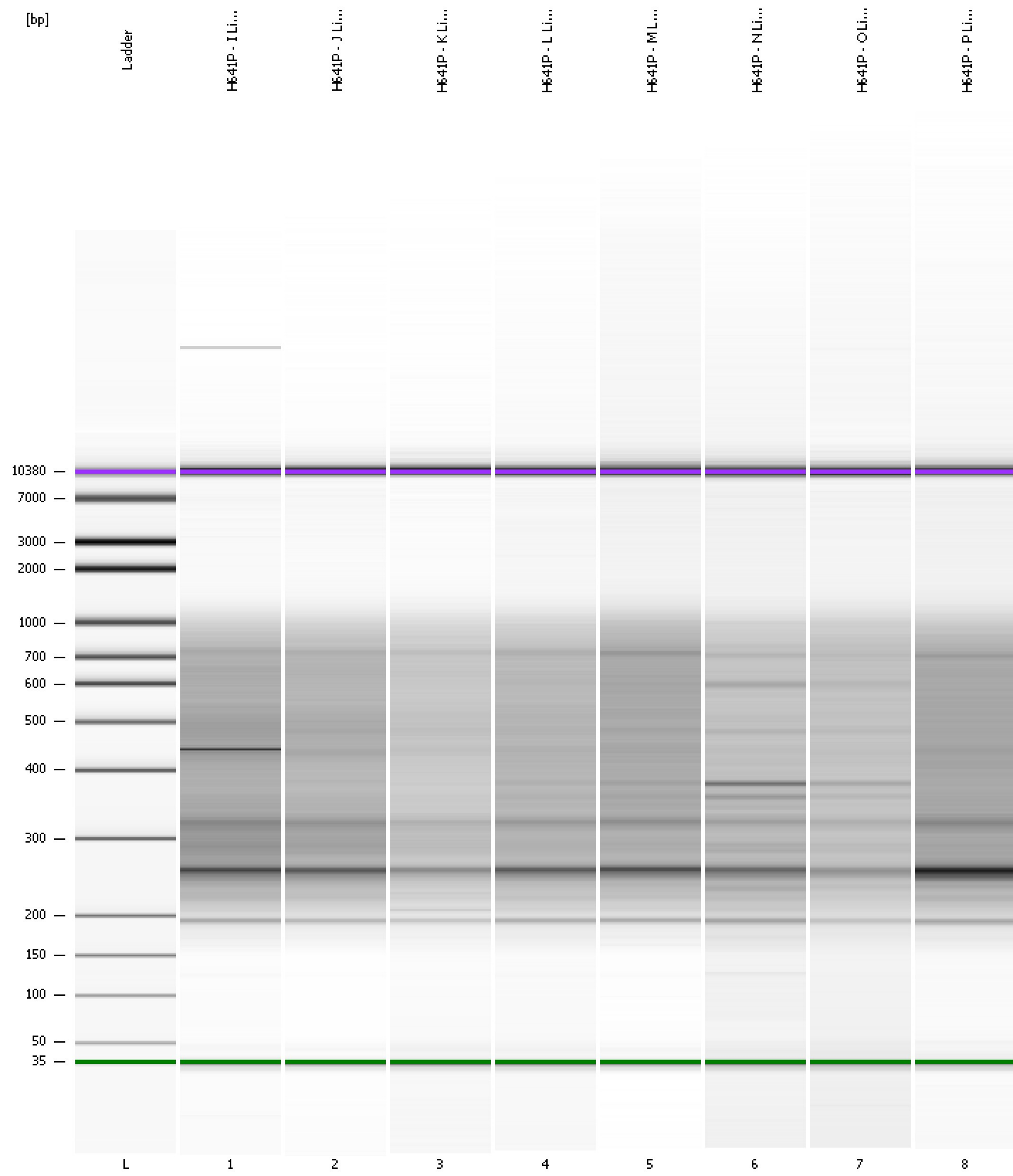
<b>From [bp]</b>	<b>To [bp]</b>	<b>Average Size [bp]</b>	<b>Corr. Area</b>	<b>Molarity [pmol/l]</b>	<b>Co Conc. lor [pg/μl]</b>	<b>% of Total</b>	<b>Size distribution in CV [%]</b>
200	1,000	436	1,115.8	7,466.3	■ 1,723.81	87	41.7



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad

Created: 1/9/2017 3:52:07 PM  
Modified: 1/9/2017 4:45:11 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay Created: 1/9/2017 3:52:07 PM  
 Data Path: C:\...a\2017-01-09\2017-01-09\_001\_H641P\_RRBS\_Libraries\_Plate2.xad Modified: 1/9/2017 4:45:11 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		1/9/2017 4:33:26 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\2017-01-09\2017-01-09_001.xad)		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/9/2017 3:52:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1